

PHYLOGENY OF THERMO-BIDYNAMIC BISEXUAL DIFFERENTIATION

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Since the ontogeny of bisexual differentiation in man recapitulates its phylogeny in his antecedents it is necessary for the medical and other social sciences to understand the latter in order to understand and rightly treat and cultivate the former. One of the most important personal and social problems of mankind is that of learning how to cultivate the bisexual differentiation of ego-attitude organization in childhood consistently with the steps of its ontogenetic recapitulation of the evolutionary phylogeny of bisexual differentiation in its antecedents. This must be done fortuitously or intelligently in order to reach matured bisexual differentiation of the personality without serious distortions. The great proportion of individual, conditioned psychotic and other neurotic fixations, impotencies, frigidities, autoerotic and homosexual attitudes, perversions and mismatings in uncivilized and civilized peoples is the result of too unilateral supermale and superfemale cultures, or of too degenerative, oppressive and seductive interpersonal relations, or of too puritanical prejudices in religion and other education against the bisexual reproductive forces of life which must naturally differentiate themselves in MALE-female, M/f or FEMALE-Male, F/m, directions in steps consistently graded and timed with other developments of the organism and personality.

No adequate theory of the biodynamic origin and evolution of bisexual differentiation has been presented by biologists, and no theory of its ontogeny in man has been presented by psychoanalysts or other psychologists that is adequate for explaining its course of development consistently with its phylogeny. The Darwinian theory, that somatic and sexual evolution is the result, through elimination of the unfit, of a long accumulation of slight genotypic accidents that determine the fitness of phenotypes for favorable environmental conditions, leaves the dynamics of the origin and evolution of bisexuality unexplained.

This subject is presented in two papers. The first gives the thermo-bidynamic evolution of bisexual differentiation. The second, to be in the next number of THE JOURNAL, presents the ontogenetic recapitulation in man of the phylogenetic order. The latter paper includes a critical comparison of Freud's long accepted psychoanalytic theory of bisexual differentiation and development in the child.

Definitions of Graded Bisexual Differentiations

This presentation includes a series of major steps that will show the continuity of the thermo-bidynamic evolution of bisexual and other somatic differentiation from primitive, weakly autogenous, thermally inconstant hermaphroditism up to highly autogenous, thermally constant heterosexualism. It includes the correlation of steps in the evolution of chromosomes, gonads, gonoducts and other somatic organs, from external fertilization and incubation, to internal fertilization and external incubation, to internal fertilization with increasing internal incubation, from oviparous to ovoviviparous to mammary and placental viviparous forms in harmony with the evolution of the autogenous regulation of heat production and loss against environmental variations and their sex reversing effects.

It is necessary to make many references in a study of this kind to primary, secondary, tertiary and quaternary grades of bisexual characters and to the major grades of hermaphroditism and heterosexualism in the bisexual constitution of embryonic and adult man and other animals. Hence a definition of these terms as used here is desirable. Much confusion exists in biological and medical literature through the use of the same terms, like primary and secondary sex characters and true and pseudo-hermaphroditism, with different meanings.

The recent medical differentiation of "true hermaphroditism," as the product of equal sex chromosomes, or of equal autogenous or acquired gonadal hormone ratios, and "pseudo-hermaphroditism," as the product of adrenal cortical and other sex related androgen-producing tissue growths, is not adequately discriminating for psychology, psychiatry, gynecology and other branches of the medical sciences. The terms should be consistent with the grades of hermaphroditism and heterosexualism as found in man's phylogeny. The graded differences in this paper follow Witschi (1939) as the most consistently evolutionary as well as logical and satisfactory for making normal and pathological classifications.

Functional or "true" *hermaphrodisism* includes two stages in evolution. *Equipotential, concomitant, bifertile hermaphrodisism* is the most primitive bisexual stage. It can reproduce through self-fertilization between its sperm and ova; found in many Protozoa and lower Metazoa (hydra, sponges). *Bipotential, alternating hermaphrodisism* produces either sperm or ova at different times and reproduction proceeds through cross fertilization (mollusks, worms).

Rudimentary hermaphrodisism or *bipotential, reversible heterosexualism* is limited to the dominance of male or female gonadal tissue with fertile sperm or ova and the opposite germ cells concomitantly rudimentary but capable of maturation when not suppressed; found in some invertebrates and many lower and higher vertebrates up to and including fishes, amphibians and reptiles. Birds have a limited fertile sex reversibility from female to male gonadal dominance upon elimination of the dominant ovary.

Unipotential, irreversible heterosexualism is limited to the dominance of male or female gonadal cells with sperm or ova fertile and the gonadal cells opposite to the genic determination irreversibly sterile or eliminated. Pathological variations producing *pseudo-hermaphrodisism*, or, better, *intersexualism* as found in the higher animals including man, are always sterile.

Primary sex characters are limited to chromosomal and gonadal structures for gamete and hormone production. *Secondary sex characters* are limited to the female gonoducts (fallopian tubes, uterus and vagina) and clitoris, and the male gonoducts (sperm ducts and vesicles) and penis, the growth of which are determined by the ratio of sex chromosomes and the ratio and the quantity of gonadal hormones. They are adapted for gamete distribution and gestation. The anterior pituitary gland might well be added to this group. *Tertiary sex characters* include the rest of the organism with its male and female organ proportions. Since it requires a greater difference in ratios of male and female hormones and larger quantities and more time to develop the matured masculine or feminine ego-attitude and personality than is necessary to develop male and female organs, scientific discrimination is sharpened by considering them as *quaternary sex characters*. Although discrimination of tertiary and quaternary sex characters has not been made in biological, experimental literature, neuro-psychological investigations (speech) indicate that sex differentiations are established in the cortical levels of conditioned integrative organization of the personality later than in the peripheral organs and the lower reflexes of the organism.

Thermo-Bidynamic Origin of Bisexual Differentiation

It is necessary to indicate briefly here the thermo-bidynamic origin of bisexual differentiation which will be fully presented in a third paper to be published later.

The term, *thermo-bidynamic*, refers to the activation by heat of bi-directional *anabolic* or energy-assimilating and upbuilding and *catabolic* or energy breaking down and releasing processes of life.

Cell metabolism has been shown to be composed of repetitious, autogenously organizing ratios of qualitatively and quantitatively, spatially and temporally placed anabolic and catabolic processes so as to maintain a state of autonomous constancy of motions in bidynamic equilibrium in the reproductive direction in reaction to its environmental supporting and disruptive energies.

The cell, as an organization of bidynamic ratios, continues to live and reproduce through counterbalancing the rate of work and self-consumption in relation to its rate of nutritional and oxygen intake and waste-elimination and reconstruction. The organized flow of anabolism is cyclical but the organized flow of catabolism is continuous and more highly adaptable. Once the latter is stopped under natural thermal ranges it cannot be renewed and anabolism is extinguished. Catabolism is more intensely oxidative than anabolism, and directly activated in special ways by special environmental conditions of which the most important is heat. To illustrate. The rate of heat production in the oxidative processes of contraction and relaxation of muscle equals 1 unit in 2 seconds, whereas in oxidative anabolic recovery the rate is 1.25 units in 5 minutes or 120 times slower (Bard, 1941). Many intracellular components are used as reversible steps in both processes and many enzymes are reversibly active in both directions, but the bidirectional flow is generally unequal for catabolism ends in decomposition and elimination. Catabolism is necessary for external reaction and for the cell's anabolic rebuilding of partly oxidized substances. The catabolic release of energy in any form of cell work is through the breaking down of larger protein and carbohydrate molecules that have been previously built into the cell's living mechanism, into more numerous and simpler, smaller molecules with greater expansive action and release of hydrogen for violent recombination. These processes are more rapidly accelerated and decelerated by increases or decreases of heat beyond an equilibrating mean, than the slower, more complex, energy-building processes.

It is therefore necessary to consider the ratio of the total anabolic and total catabolic, chromosomal and cytoplasmic, processes of a cell. Whatever its species or type, its viability and reproductivity are obviously determined by this energetic ratio unless the deficiency is supplied by other cells. All cells, hence organisms and their gametes, naturally undergo quadrilateral differentiation of bidynamic ratios into the $A+C+$ bilaterally strong; the $A-C+$ hyperkinetic; the $A+C-$ hypokinetic; and the $A-C-$ bilaterally weak. All of these types are found in unicellular animals, and the $A+C+$ type continues reproductive. Eventually it runs down into an $A-C+$ or $A+C-$ or $A-C-$ type, that disintegrates unless it conjugates. The $A-C+$ and $A+C-$ types are the only two that will upon union form an $A+C+$, viable, reproductive zygote. Hence the $A-C-$ variations are self-eliminating. This bidynamic differentiation led to the origin of bisexual differentiation in gametes in Protozoa and extended to Metazoa. Evidently union and reproduction is inseparable from acquisitive, self-preservative, physico-chemical compulsion for nutrition and avoidance of injury.

It has been shown that ratios of anabolic-catabolic aggregates in chromosomes and cytoplasm react at different rates to prolonged quantitative variations in heat, light, humidity and other activating factors coming from solar and lunar sources in climatological, monthly and diurnal cycles. The increase of heat, more than any other external factor, above an equilibrating level peculiar to the special chemical constitution of primitive, bisexually equipotential germ cells, accelerating accumulatively the energy-releasing oxidations of more active catabolism faster than the energy-building oxidations of slower anabolism, has been the chief differentiator, producing an $A-C+$ ratio in its cytoplasmic bisexual reproductions, characteristic of sperm; whereas decrease of heat (cold) below this mean level depresses catabolism faster than anabolism and produces an $A+C-$ ratio, characteristic of ova.

Evolution in Bisexual Differentiation of Chromosomes

Lowest hermaphroditic Metazoa produce concomitantly male and female germ cells and gonads and haploid fertile sperm and ova. Since the zygote and all descendant cells in diploid organisms probably inherit homologous complements of chromosomes, except the meiotic, haploid gametes, the chromosomes of bifertile hermaphroditism are bisexually equipotential. Then male and female gametes and germ cells and gonadal cells must differ in anabolic-catabolic cytoplasmic ratios in

reaction to chromosomal and intercellular and other environmental position effects, including thermal, luminary and electrochemical activation, and nutrition, respiration and elimination. It is therefore necessary to evaluate the different extents of evidence in three degrees of bisexual differentiation: (1) the bidynamic ratio A/C including the aggregates of all nuclear and cytoplasmic anabolic and catabolic factors; which includes (2) the chromosomal and cytoplasmic bisexual ratio M/F ; which includes (3) the bisexual chromosomal ratio $AAXY$ or $AAXX$.*

From the primitive, hermaphroditic, equipotential, bifertile, bisexual $A+C+$, M/F , AA germ cell basis, an increasing bisexual differentiation of $A-C+$ (sperm) and $A+C-$ (ova) first developed in the more unstable cytoplasm. This was probably followed, as taxonomic evidence indicates, by increasing bidynamic cytoplasmic differences in germ cells followed by quantitative and qualitative chromosomal genic differences.

An illustration of steps in gametic bisexual differentiation is given by Danforth (1932). Sex differentiation probably evolved in a graded series of minor steps. These can be illustrated by selecting at random a number of species living today. This method legitimately covers the gaps produced by the extinction of intermediary steps in the evolution of species and indicates how bisexual eggs and sperm gradually differentiated, attended by fitting differentiations of bisexual, somatic organs for their special production and distribution.

* A represents the aggregate of nuclear and cytoplasmic *anabolic* factors and C represents the aggregate of such *catabolic* factors. Male and female gonadal cells in hermaphroditism have like bisexual ratios of chromosomes, but differ in such cytoplasmic ratios and both sets of factors in either type of cell are anabolic and catabolic in constitution but in different degrees. Hence A or C is not comparable to M or F in gametes, germ cells, gonads or other cells or to the AX or AY chromosomes. The ratio of A to C however is a valid representation of the aggregate of cytoplasmic and chromosomal bidynamic constitution of any cell or any part of it, of any organ or of any organism. Using $+$ and $-$ to mean relatively strong and weak, $A+C+$ represents the ratio in the aggregates of cytoplasmic and chromosomal determinant in hermaphroditic, equally bisexual M/F cells and organisms. Since the chromosomal determination at this stage of evolution is without decisive sex differences it is designated as AA . $A-C+$ represents the ratio of weaker anabolism and stronger catabolism in the aggregate of cytoplasm and chromosomes with stronger maleness over femaleness, M/f , as found in sperm. $A+C-$ represents the ratio of stronger anabolism and weaker catabolism in the aggregate of cytoplasm and chromosomes in weaker maleness and stronger femaleness, F/m , as found in ova.

In heterosexualism, male zygotes are differentiated bidynamically as $A+C++$ with a gonad bipotentiality of M/f and a chromosome determination of $AAXY$. Female zygotes are $A+++C+$, F/m and $AAXX$ (using the chromosomal designation of mammals).

In some species of algae (colonial Volvocineae) which, next to bacteria, are the most simple known organisms, the reproductive cells seem to be alike and produce asexual or agamic zoöspores. In other species zoöspores, not needing fertilization, and gametes needing fertilization are produced. The gametes seem to be alike and equipotential, apparently with capacity for fusion between any two. In other species the same mother cell produces gametes that show + or - differences which are suggestive of rudimentary differences of maleness and femaleness. In still higher species, while both types of gametes are more or less motile, the differences in size and function are definitely characteristic of gametic sex differences in higher animals. In related species there are also differences in mother cells of sexually different gametes which, Danforth suggests, exemplify the first simple somatic differentiation.

The morphology and behavior of ova and spermatozoa shows that their essential differences exist in the bidynamic ratios of their chromosomal-cytoplasmic interactions. In hermaphroditic differentiations the chromosomes of all sperm and ova are probably equal. This is consistent with the fact that the chromosomes of all ova and one half of sperm in many heterosexual species, or one half of ova and all sperm in probably all others, are bisexually equal. Since sperm are small, highly motile cells, whereas ova are large, almost immotile cells, it must be concluded that the cytoplasm of sperm has an A-C+ ratio whereas the cytoplasm of ova has an A+C- ratio. Since more mammalian males than females are born it is indicated that the Y spermatozoon is slightly more active than the X, due to the greater ratio of male genes over female in the chromosomes. The cytoplasm of fertilized eggs is equivalent for both sexes if both X and Y spermatozoa have equivalent cytoplasm. Then the sex-differentiating bidynamic factors of the zygote must exist in the differences in the male and female genic ratios in the AAXX and AAXY chromosomes. Whether the difference exists in the cytoplasm or chromosomes or the result of their interactions, two slightly but decisively different ratios of the aggregate anabolic and aggregate catabolic factors are produced in the zygote. When the bidynamic ratio is A+C++ (anabolism < catabolism) it normally determines that the growth of M/f cells in the gonads, hence soma, will be stronger than F/m, and when it is A++C+ (anabolism > catabolism) the growth will be reversed. Since the heterosexual, bidynamic zygotic A+C++, M/f and A++C+, F/m differentiations evolved from hermaphroditic A+C+, M/F forms, comparable regressions in the heterosexual constitutions to the hermaphroditic also include the sterile intersexual

A+C+ as regressive and the sterile supermale A+C+++ and the superfemale A+++C+ constitutions as excessive divergences which are self-eliminating.

The best explanation of how bisexual chromosomal differentiation evolved has been given by Bridges (1939). In brief, he showed that the genic determinants of one sex tend to converge through linkage in meiotic crossings and chromosomal breaks and translocations in one chromosome, known in cytology and genetics as the sex chromosome X, with little or no sex genes in its Y mate. Genes of the opposite sex tend at the same time to remain distributed throughout the chromosomes, known as the autosomes A. Such evolution in linkage led from A+C+ bidynamic or AA chromosomal hermaphroditism to an increasing convergence of female genes in an X chromosome in some vertebrates (fishes, reptiles and mammals) and a reverse convergence of male genes in the X chromosome in others (fishes, birds).

Geneticists have generally concluded that qualitative chromosomal and genic changes are accidental mutations and the fittest organizations survive through natural selection. I hold that cytoplasmic bisexual and other differentiations are *quantitatively environmentally determined* (intracellular and extracellular) and *qualitatively chromosomally determined*, in germ cells as well as gonadal and other cells. Quantitative cytoplasmic adaptations led to quantitative genic changes which led to qualitative genic and chromosomal changes in meiotic crossings. Thus the evolution of life is more pragmatic than fortuitous.

Witschi (1932) sums up the bisexuality of the gametes and the bisexuality of the organism as follows: "What appears as the sex of a gamete or an organism is in fact only the dominant sex, while the entire constitution includes both male and female potentialities." "Unicellular organisms may develop into either sex, and — higher plants and animals may develop into hermaphrodites or gonochorists depending on conditions controlling the activation of sex potentialities."

In vertebrates the trend in evolution, according to Witschi (1939), has been that of changing from nearly equal size of the X and Y chromosomes, as found in fishes and amphibians, to inequality in mammals, with Y smaller than X, to loss of Y in birds. The significance of evolution in bisexual differentiation of chromosomes is best understood in relation to its decisive effects upon the ratio of catabolic to anabolic oxidation and autogeny versus exogeny in reproduction, and the progressive increase of heterosexual differentiation of gonads, gametes and zygotes. Increasing variations in chromosomal amphimixis and crossing over,

hence hereditary transmission, through reproductive selection between fittest males and females in organisms and gametes, promotes greater autogenous gonadal and thermal accelerations or reversals in the male or female direction, as well as autogenous controls of other environmental imbalancing conditions.

Progressive, Autogenous, Reproductive Selection

If the theory of thermo-bidynamic origin and evolution of sex is correct, it should show how much physico-chemical differentiations were initiated and extended. Unseasonal extremes of heat or cold produce respectively in hermaphroditic Protozoa and Metazoa, excesses of male or female germ cells and gametes in the population of a species. These are eventually equalized as the total annual heat supply is equalized, making minimal work for mates and competition in the same sex. In more slowly reproductive, larger, more highly developed, bisexually equipotential Metazoa, unseasonal extremes of heat and cold produce greater annual disproportions of sex in the adult and gametic populations. As such disproportions increase in a species, the chemical need and drive for mutually excitatory and equilibratory paired unions increases between sperm and ova, and between adult male dominants for female dominants and females for males, tending to eliminate less excitatory and acquisitive organisms and physico-chemical mechanisms. Competition is further intensified as heterosexual differentiation increases with sex differences in populations, establishing a progressive, convergent, reproductive cycle with elimination of the less fit, tending eventually to self-elimination in species in too severe climates. These autogenous and exogenous factors eliminate from reproduction all but limited specialized phenotypes, hence genotypes. This tends to force the convergent evolutionary breeding of an accumulative organization of bisexual organs in harmony with special somatic organs that are fitting for the mutual excitations of mating and violent competition, as well as work for survival against other naturally selective environmental supporting and opposing forces.

From the laws of thermodynamics and taxonomic evidence on the origin and evolution of bisexual differentiation in chromosomes, zygotes, gonads and organisms we can work out the law of *thermo-bidynamic evolution*, that is, the use of energy in life for reproduction and work.

As more energies are used in the development and work of sex and somatic organs for increasing autogenous determination over unbalanc-

ing environmental forces of all kinds (including the fluctuations of heat and humidity), the reproductive rate decreases and sexual selection becomes increasingly severe and progressively limiting and physico-chemically specialized. Conversely, as less energies are used in work for survival and selection, more energy is used in reproduction, hence greater variation.

The extent of influence of this law in the evolution of life and human society is enormous. Although such accumulative autogenous pressures of energy for survival and reproduction characterize all cross breeding species, only those types are able to survive and continue to evolve that have basic, physical and chemical patterns in their embryonic phases that can undergo progressive transformations to fit new environmental conditions.

Origin and Evolution of Gonadal Sex Differentiation

The appearance of sex differences in gametes of algae, the most simple forms of plant life above bacteria, before they appear in the mother cells, further indicates that organisms developed gametic sex differences before the gonadal and, as in Protozoa, the differentiation was probably determined by temperature and other external factors influencing metabolism. In later, more complex forms of algae, sex differences appear in the adult germ cells as they do in higher plants and animals. This means that, as sex differences were extended to gonads, the sex of future gametes was increasingly predetermined before they were formed by the germ cells (Danforth, 1939). The extension of sex differentiation to gonads was a step in autogenous control of reproduction against reversal by the external environment and laid the foundations for entirely new lines of evolutionary development. The earliest multicellular animals and plants were probably bifertile hermaphroditic like the lowest forms today, hence their gonadal primordia and germ cells were bisexually equipotential.

The positional influence in gonadal and other organ differentiation found in embryonic animals is also found in the primordial cells or anlage of typical flowers. Groups of *laterally* placed cells differentiate into stamens which produce pollen, while the more *centrally* placed cells produce the pistil and ova. Their chromosomal constitution is evidently equally bisexual, with capacity up to a certain stage of producing female or male germ cells and gametes. This seems to mean that, in an immense number of bisexual animals and plants, sex is not an attribute of any par-

ticular cell, but is the result of the equal, qualitative bipotentiality with which all cells are endowed until they become cytoplasmically quantitatively differentiated by exogenous and autogenous physico-chemical differences in the activators and inhibitors of anabolism and catabolism.

Reversibility of fertile gonadal differentiation, in response to changes in certain environmental conditions, upon removal of the dominant determinant, is normal in many thermally inconstant invertebrates. Their transition stages from dominance of maleness to femaleness and vice versa, comparable to those observed in cases of intersexuality and sex reversal in higher vertebrates have been described by Coe (1940). The sexual differentiation of all multicellular animals (except insects) is based on the same general principles: namely, the somatic organs of the two sexes have a similar origin from sexually undifferentiated primordia, and differentiation results from different rates of growth in different positions in the whole, through the M/F ratio of gonadal nutrition and rates of activation by external environmental agencies. *The gonads are bisexual, and the relative dominance of male development with more or less suppression of female development (M/f) gives the organism its mature male genital and somatic characters with rudimentary female characters, which is what is meant when the term MALE is used. The term FEMALE is applied to dominance of female gonadal and somatic development with rudimentary suppression of male organs (F/m).*

Many lower Metazoa develop fertile male and female gonads at the same time, or at different times, in reaction to special external environmental factors. These include such invertebrates as worms, crustaceans, starfish and sea urchins, mollusks and some fishes. Most invertebrates make a single change, usually from male to female. In some cases an overlapping phase of fertile hermaphroditism is produced in which self-fertilization may occur. All species of invertebrates studied have shown two intergrading types of males, Coe (1940) says, in which one is hermaphroditic and soon changes to female and the other is a true male. In the former the gonads have a basal layer of ovocytes with spermatogenic cells superimposed near the lumen. In true males the ovocytes are eliminated and their sexual type is not changed.

Some invertebrates, like the Atlantic oyster, have great lability and show unpredictable changes of sex from one season to the next (*alternative sexuality*). Usually, after the first season many young males change to females, tending to equalize the sexes. Some of the females may change back to males and then to females again.

An illustration of *consecutive sexuality* is found in the marine snails. The young function as males first and then change to female according to hereditary chromosomal determination. This phenomenon is comparable to metamorphosis from the larval to adult condition in insects and Amphibia, and the length of time of the male phase is subject to external temperature. The individuals also vary hereditarily in the relative strength of sex-determining factors. Those with numerous ovocytes are more hermaphroditic and less masculine in the search for females and in attaching themselves sexually. They become females earlier than those having fewer ovocytes. The presence of a female lengthens the male phase whereas isolation shortens it. The transition period also varies in length of time according to environmental conditions, and resembles stages of sex intergrades or sex reversals.

Rhythmical sexuality is alternative sexuality more regularly repeated, and is found in related species.

Intersexuality or incomplete, sterile, sexual differentiation, produced by interbreeding different species or races, is primarily the result of equality of male and female genic factors. Many grades of intersexuality have been produced through crossed interbreeding in algae and other plants, in insects and birds, and in mammals, including man.

Sexual differentiation is also produced by a related class of chemical substances which include the androgens and estrogens. In many instances they are absorbed through ectodermal surfaces in sufficient quantities as a natural process in sex differentiation. The worm, *Bonellia*, gives an example of sex regulation by external absorption of chemical determinants. Isolated larvae develop into females several centimeters long with an excessively long proboscis. But larvae which settle on the female's proboscis differentiate into minute parasitic males. When larvae are removed at different stages of growth, the younger grow into females, whereas the older, more differentiated ones become intersexuals of varying grades according to the degree of sex development. Experiments with extracts of the female have produced similar results. It appears that the M/f state of one is a product of F suppression through an intercellular chemical action originating in the matured F/m organism.

The slipper Limpet (*Crepidula*), a marine snail destructive to oysters, also shows a chemical influence on sex differentiation. Young individuals attach themselves to the shells of older ones, which are all females. They grow through a male stage in which they fertilize the eggs of the females. Now if the young ones are kept separated from old ones, they grow quickly into females with a brief male phase of

growth; but if, while separated, they are left in the same water with the female, a chemical influence makes them pass through the full male stage (Coe 1940).

Sex hormones in water have been found to influence and even reverse the sex of fishes. Terrestrial vertebrates (reptiles, birds, mammals, including man) are reactive to sex hormones and allied substances transmitted by contact through the skin or food. The trait seems to have been carried over from marine life. It seems to be an important adjunct to the solar, lunar and climatic adaptation of reproduction of animal life with plant life. Since plant and animal vitamins and hormones are chemically allied, germinating life in plants may be the initiator of the germinating phase in herbivora and passed on to carnivora.

Insects have ovaries or testes but they are said by some investigators not to produce sex differentiating hormones. In some species the degree of development of sex differences is determined by the quantity of hormonal factors obtained through foods. In many insects the genic sex difference is so strong that its influence on somatic characters is not reversible by hormones or changes in heat or light. In other insects (bee) the degree of development of the female gonads and other organs is determined by the quantitative-qualitative intake of nutritional substances.

Witschi (1939) has pointed out that in most of the invertebrates (such as mollusks and slugs) and lower vertebrates (such as lampreys) a similar type of neutral or undifferentiated primordium of the gonad is formed in which the mother cells of eggs and sperm come from a common source and collect about a central cavity, producing ova and sperm side by side. The gland may develop more in the male or female direction as determined by external factors or it may retain both types of fertile germ cells. When mature testis and ovarian tissues form spermatozoa and eggs, they are cast off into the peritoneal cavity and conducted by simple but specialized pores or ducts to the urogenital sinus of the cloaca whence they are extruded into the water under certain physico-chemical conditions favorable to fertilization.

In such vertebrates as the tailless amphibians, the gonads develop out of differentiated primordial layers of the intermediate mesoderm. A cortical layer forms which produces the rudimentary ovary, and a medullary layer forms which produces the rudimentary testis, in both male and female embryos. The gonads persist as an ovotestis and produce both eggs and sperm from the different layers of cells. As an organ it

remains incompletely differentiated, and functional hermaphroditism may be restored even when one sex is generally rudimentary.

Young eels are hermaphroditic in their gonadal rudiments when they enter the mouths of rivers. Those continuing to live in the more equable temperature of salt water tidal bays develop male organs, whereas those ascending the cold, fresh water streams in early spring develop female organs. Temperature and possibly the chemistry of the water and food influence the sex differentiation.

In frogs, experiments with temperature and sex have shown that in a number of species (*Bufo vulgaris*, *Rana temporaria*) low temperature (10 degrees C.) causes a relative retardation of male medullary development of the gonads on larval forms, whereas in high temperatures, (25 degrees C. to 30 degrees C.) the cortex is destroyed as medullary development determines male growth. It seems that this evidence can be interpreted in line with the theory of thermal origin of bisexual differentiation. Cold inhibits the medulla with its lower anabolic-higher catabolic ratio, more than the cortex with its higher anabolic-lower catabolic ratio, and permits the latter to grow faster and dominate. In cold spring temperatures, other factors being equal, more females are produced in thermally inconstant species, through inhibiting the antagonistic influence of the medulla and releasing the cortex to dominate sexual growth. In high spring temperatures more males are produced through activating the androgenic medulla more intensely than the estrogenic cortex. Changes in temperature at critical embryonic stages generally dispose to the development of hermaphroditism or sterile intersexes. (Witschi, 1942).

The thermal bisexual differentiation of gonadal metabolism in thermally constant or warm blooded animals like the mouse has been demonstrated by Hill (1937). He produced partial sex reversal of the ovary by transplanting it under the skin of the ear of a castrated male. The follicles degenerated, leaving mostly lutein-like cells, which are possibly developed from the theca interna, a medullary derivative. If the mouse is then kept at a temperature of 33 degrees C., about the normal internal body temperature, the seminal vesicles and prostate remain undeveloped or castrate in type. If such mice are kept in 22 degrees C., which is about scrotal temperature, the seminal vesicles and prostate develop to normal size and secretory activity, showing male

hormone production by the degenerate ovary. Similar results were obtained in rats by Deanesley (1938).*

Low temperature retardation in cold blooded animals of gonadal medullary development, favoring ovarian growth, and high temperature leading to the destruction of the cortex and favoring testis growth, and high temperature in warm blooded animals favoring ovogenesis and preventing the testis production of fertile spermatozoa, and lower scrotal temperature promoting testis growth and spermatogenesis, have been correlated as evidence of gonadal "reversal of sensitivity" by many biologists.

It seems, however, that this evidence can also be interpreted consistently with the thermo-bidynamic origin and evolution of bisexual differentiation. The differentiation of gonadal androgenic and estrogenic hormone production and capacity for neurohumoral regulation of heat production and loss seem to have evolved concomitantly, for they so ontogenetically recapitulate and develop in the young individual of thermally constant species. The antagonistic ratio of the A+C-, F/m gonadal cortex to the A-C+, M/f medulla adapted, as autogenous heat production increased in reptiles and lower animals, so that either side dominated and the other inhibited, with rudimentary fertility, according to the chromosomal determination, when the rate of external heat activation did not increase or decrease the body temperature. As the organism's capacity for producing a constant high level of body heat increased the chromosomal and gonadal differentiation increased and vestigial infertility to extinction of the inhibited side followed. Body temperature also became further increased during the more active phases of estrus and increased more in androgenic than estrogenic metabolism. It eventually grew excessive for spermatogenesis but not for ovogenesis except in fevers or excessive external heat. Male sterilization was prevented in such animals (rodents, ungulates) by descent of the testes during estrus into contractile-expansile scrotal radiators for reduction of temperature. As heat production became constant (carnivores, anthropoids) scrotal descent of testes became an early, constant and indispensable adaptation. Hence we may conclude that it was not an accidental

* In connection with heat favoring stronger growth of the gonadal medulla over the cortex with reversal in ratio by cold, it should be considered that the male chromosomal pattern AAXY of mammalian and most other vertebrate zygotes is now thought to be more active chemically than the AAXX female pattern, and androgens are more active than estrogens, and in sexually well differentiated vertebrates male organisms are generally more thermogenic or catabolically stronger and anabolically weaker than females.

genetic reversal of gonad sensitivity that occurred in evolution but a consistent, progressive differentiation in anabolic-catabolic ratios of ovary and testis, adapted in relation to total exogenous and autogenous heat activation, with the latter requiring thermal reduction in scrotal migration upon high thermal constancy.

This theory is consistent with the laws of thermodynamics applied to differences in the oxidation rates of anabolism and catabolism and of androgenic $A+C++$ over estrogenic $A++C+$ effects upon metabolism. The difference in maleness and femaleness of growth, Riddle (1932) maintains, rests upon the difference in initial and sustained basal oxidation rate, which is higher in males than in females. "This specific sex differential," he says, "is the primary and really decisive element (beyond chromosomes and genes) both in normal sex determination and in sex reversal; it is also considered the foundation of sex as a quantitative thing." This theory is similar to Child's (1940) idea of embryonic positional gradients of metabolic intensity.

The law of thermo-bidynamic bisexual differentiation may now be stated as follows:

I. The cytoplasmic effects of equipotential chromosomal bisexuality are differentiated in the $M/f A-C+$ direction by increase of heat over the equipotential mean and/or by androgenic substances, and are differentiated in the $F/m A+C-$ direction by decreases of heat under the equipotential mean and/or by estrogenic substances.

II. As the ratio in bisexual differences in chromosomes increases, the ratio in bisexual differences in gonads and hormone production increases in the same direction, and the cytoplasmic reversing effects of opposite sex hormones and of opposite variation in environmental heat decrease.

Extreme climatic conditions, when not interfering with the food supply, dispose to great inequalities in equipotential sex populations, which intensifies sexual competitions and converges upon the evolution of stronger differentiations, hence species, in the direction of increasing autogenous gonadal sex determination in support of the chromosomal sex determination. This trend is further supported by increasing autogenous, autonomic and somatic heat regulation. Such thermo-regulatory evolution in nature was determined, it seems, less through the exogenous factors of natural selection, particularly competition for food, and more through the autogenous pressure of sexual selection and mating, as will be shown more fully later by additional evidence on the evolution of homologous bisexual organs with temperature regulation in mammals and birds.

Sex Differentiation of Germ Cells

In most of the higher vertebrates (reptiles, birds, mammals), the male and female gonads as well as the gonoducts develop from more highly differentiated, intermediate mesodermal primordia and, although all grades of intersexuality are evident in the rudimentary degrees of the weaker sex, functional hermaphroditism does not occur.

The primary germ cells, it is held by many investigators, are bipotential (Willier, 1939; Witschi, 1939) and may differentiate in either sex direction, depending upon their location in the cortex or medulla of the gonad. In opposition to this view Moore (1944) claims that the differentiation of germ cells in the gonads is chromosomally predetermined. The primordial germ cells as precursors of the reproductive cells (gonia) are thought by many embryologists to arise in the entodermal layer in amniotes (reptiles, birds, mammals), outside of the gonad-forming area, prior to the time of its origin. They live during the primitive streak as wandering cells in the blood stream, and finally migrate with ameboid movements through the entoderm and mesenchyme to the gonadal sites.* The undifferentiated primordial germ cell has numerous dark staining granules scattered in the cytoplasm. Upon sex differentiation in the male direction the germ cells in the medulla become scattered, single and larger, and the granules gather on the side of the nucleus and are less distinct. Female cells in the cortex become grouped and smaller, with granules gathered near the nucleus, showing distinctly. The germ cells that remain outside of the sex cords remain unchanged (Willier, 1939).

In the evolution of the vertebrate gonad different patterns of formation are found, but the female cells in the cortex and males cells in the medulla are homologous. In many species the cortex develops first, both cells appearing there together. Later (in amphibians) the male cells migrate internally to form the medulla on conjunction with the development of gonoducts. In higher vertebrates part of the germ cells pass into the medulla from the very beginning, and degenerate if the gonad develops into an ovary. Otherwise they become spermatogonia and the cortical cells regress.

Evidence in favor of the theory of equipotential germ cells, differ-

* The first sex cell has been found as early as the sixteenth cell stage of the blastula in the parasitic round worm (*Ascaris*) which has but two chromosomes. At this stage one cell produces sex cells. Its specialization can be traced back to the first division of the zygote.

entiating in the gonads in the male dominant-female subordinate direction or vice versa, exists in experimental, functional hermaphroditism and sex reversal. Fertile, amphibian hermaphrodites have been reported for both male and female types of zygotes with retention of the original sex differentiated chromosomes. Witschi and Crown (1937) reported that in chromosomally female fish injected androgens inhibited ovarian development and activated fertile testicular growth and male organs. Upon the transformation of females into males the germ, gonadal and somatic cells retain the original chromosomal sex determination, showing that the hormone is more active than sex genes upon the cytoplasm. In hens, upon being reversed by left ovary elimination, the body cells retain the female XY pattern and X and Y sperm are produced, whereas in the normal cock the gonads and body cells have the male XX pattern and only X sperm are produced. Such evidence, with gonadal differentiation and regulation of sex, leads to the conclusion that *genic sex determination controls only the initial development of the cortex and medulla of the gonads, but that is sufficient to establish autogenous gonadal control of differentiation under favorable thermal conditions.* It is indicated that in more intense chromosomal determination and high thermal constancy only germ cells in the same sexed gonads survive.

Origin and Evolution of Cells Producing Sex Hormones

Little is known (Danforth, 1939) about the origin and evolution of the cells which produce the sex hormones. Willier (1939) has concluded, from similar effects of sex hormones in adults and embryos of chicks, and embryonic graft-host combinations, that the hormones produced by embryonic and adult gonads are similar if not identical. Estrogenic substances are related to androgenic and carcinogenic substances. They are found in seeds, nuts, flowers, roots, yeast, unicellular organisms and bacteria. They seem to be essential to cell mitosis and all forms of reproduction in plants and animals.

From the behavior of young ova and sperm and their dependence upon the secretion of nursing cells to reach maturity, it is indicated that the increase in number of nurse cells continued from colonial protozoan "somatic gonads" in the direction of forming gonads that produce special nutritional substances (hormones) which also contribute to the growth, differentiation and maturation of the gonoducts. Later in evolution this secretory capacity increased in ratio of sex differences and in

quantity sufficiently to differentiate also the maturation of sex characters in somatic organs and the personality.

The evolution of the factor by which the organism controls the direction of its sex differentiation and development against external thermal reversal came principally with the origin of the cells of internal secretion of sex hormones and their differentiating effects on bipotential germ cells. Interest has been directed at certain striking homologues that exist between the sexes here. The granulosa cells of the ovary and the sustentacular cells of the testis have a common origin in the follicle cells of the primordial gonocytes of amphibians and probably birds and mammals. Since the granulosa cells produce the estrogenic substances of the ovary it is indicated that sustentacular cells may possibly produce female hormones, found in male urine and testis extracts. Another possible source is suggested in the appendix testis to be described later. The interstitial cells of the medulla secrete the male hormone, and the homologue in the female exists as rudimentary cords in the medulla of the ovary. The origin of sex hormones is by no means solved. Estrogens in male urine are thought by some investigators to be derivatives of androgens. Professor C. R. Moore (personal communication) says considerable evidence exists that the germinal epithelium of the testis secretes a hormone which is different from that produced by the interstitial cells and the production of a hormone by the sustentacular cells is questionable.

The evolution of the gonad has been from a bisexual organ having a layer of mixed male and female cells in lower vertebrates, to one in which a cortex of female cells differentiated from the medulla of male cells (reptiles and birds), leading to a decided or almost complete suppression of the medulla in ovaries and of the cortex in testes, of the highest vertebrates.

The ovary has remained morphologically more simple than the testis but it has become more complex as an endocrine organ. Allen, Hisaw and Gardner (1939) have written an interesting review of the evolutionary trends in ovarian function. The earliest evidence of the ovarian production of a hormone is found in lower vertebrates where it is important in the maturation and evacuation of eggs. A simple hormone appears in seasonal waves with egg production. Concomitant with the development of the ovary and the suppression of the medulla, and growth of the female ducts and suppression of the male ducts, the quantitative hormone production seems to have increased. In birds a single female hormone (theelin or estrogen) is found, and in

mammals this is increased to two or three (progesterone, relaxin). In birds the follicular epithelium is thin and no corpus luteum is formed and no progesterone is produced, although the pituitary of birds contains both ovarian follicular and luteinizing tropic hormones.

Evolution of Gonoducts and External Genitals

The evolution of the gonads and their production of male and female hormones was attended by evolution of the kidneys, adrenal cortex, gonoducts, cloaca and external genitals and mammary glands and the eggs and sperm, in relation to the evolution in protein and water metabolism, neuro-humoral heat regulation, and somatic parts of the whole organism. This outline of comparative evolution in reproduction is presented in some detail to show the continuity of essential transformations that occurred under chromosomal and hormonal regulation in combination with the development of greater autogenous capacity for heat regulation.

The heterosexual glands of the higher vertebrates (reptiles, birds, mammals) as previously stated, evolved from the undifferentiated or equally bipotential, hermaphroditic gonads as found in invertebrates and low vertebrates. In general, ovaries differentiated through greater growth of the cortex of the primitive gonad with greater secretion of female hormone, and suppression of the medulla with reduced secretion of male hormone; and testes differentiated through proliferation of the medulla with greater secretion of male hormone, and suppression of the cortex with reduction of female hormone. The male and female gonoducts in hermaphroditism develop concomitantly or alternately as the gonads develop.

The predominant interpretation of experimental investigation holds that male and female gonoducts are *unipotential* and grow in reaction to the same sex hormone and are inhibited by the opposite sex hormone. The genital eminence and outlet of the urogenital sinus of the cloaca, from which the external genitals develop are *bipotential* and evolve homologous parts in both sexes. These parts become unipotential and grow, as male or female, proportional to the ratio and quantity of androgenic and estrogenic hormones.

In vertebrates the excretory nephric tissues and ureters, disposing of water soluble nitrogenous and saline waste products of metabolism, and the reproductive gonads and gonoducts and cortex of the adrenals, develop in close physiological relation directly or indirectly from a com-

mon source in the urogenital ridge of the intermediate mesoderm. This embryonic field seems to have the highest vascular convergence of anabolic excesses and catabolic biproducts. The former are used for reproduction or eliminated with the catabolic biproducts.* The ontogeny of the genito-urinary system consistently recapitulates its phylogeny which was adapted to different environmental ratios of salts and water, ranging from isotonic sea water, to fresh water dilution, to terrestrial limitations of fresh water.

Three special types of secretory tubules were evolved in similar mechanistic ways to regulate urinary osmosis in different ionic concentrations. All were supplied with blood by capillary glomeruli. Since man and other higher vertebrates recapitulate the order of evolution the presentation will be simplified by treating them as a group.

First a bilateral, segmental *pronephros* is developed in all vertebrates as an anterior series of segmental, uriniferous tubules or nephrotomes. It is functional in adult Amphioxys and certain lampreys and in free swimming aquatic larvae of fishes and amphibians but probably not functional in the amniotic vertebrate embryos. Its chief activity is the elimination of ammonia waste products of metabolism generally where the intake of water is isotonic. While its duct continues to serve as the mesonephric ureter its nephric cells become functionless and degenerate in amniotic vertebrates with the early embryonic development of the *mesonephros* from the middle nephrotomes. This organ is functional in all vertebrates and remains the adult kidney in external, aquatic incubating, thermally inconstant amniotes, including fishes and amphibians. It is the functional kidney only in the early embryonic stages of external, terrestrial incubating amniotes including oviparous reptiles and birds, and internal incubating amniotes, including ovoviviparous reptiles and viviparous mammals. Like the pronephros and metanephros it forms a capsule around a capillary glomerulus which with branches supplies olites by the secretory part of its tubule. The function of the mesonephros indicates the purpose of its evolution in that its lower collecting tubule reabsorbs salts and thereby preserves the constancy of ionic concentrations of the blood against dilution by constant fresh water drink-

* Figure 115, page 168 Shumway, W., 1942. Introduction to Vertebrate Embryology (4th Ed.). John Wiley & Sons, New York. Diagram showing early development of gonads and glomeruli.

ers. Fresh water fishes that return to sea undergo secondary renal adaptations.*

Each mesonephric tubule forms numerous branches which end proximally in a glomerular capsule or become connected early in embryonic development with the hollow nests of cells in the medulla of the gonad while the distal ends become connected to the ureter which conducts sperm and urine to the urogenital sinus of the cloaca. The growth of embryonic mesonephric tubules into nests of gonadal medullary cells, and middle nephrotomes, and not into nests of gonadal cortical cells, indicates that similar, positive chemotaxic cytoplasmic factors exist early in the development of the first two which are differentiated from a negative or chemophobic constitution of ovarian cells which need the development of special ovarian ducts.

In fetal amniotes the nephric ends of the mesonephric tubules degenerate and the gonadal ends proliferate as a hydrophilic *metanephros* develops. The metanephric duct begins as an evagination of the mesonephric duct near its entrance into the cloaca and grows dorsally and forward to form the permanent amniotic ureter. It pushes into the posterior, unsegmented, metanephrogenic mass which separates from the mesonephrogenic tissue. It forms the pelvis of the kidney and divides into a series of branches ending in long, convoluted collecting tubules each of which connects with tubules of secretory nephric cells encapsulating a glomerulus. The whole mass of uriniferous units forms the kidney of the adult amniote. The evolution of the metanephros is also indicated by its special function. Like the mesonephros it secretes urea (uric acid in birds), salts and other wastes and excessive metabolites and toxins, but reabsorbs water, thereby serving to maintain the ionic constancy of the blood against dessication in terrestrial, periodic drinkers (Baldwin, 1937; Arey, 1942). The metanephric duct or ureter continues to empty into the mesonephric outlet until the cloaca enlarges by incorporating it and gives to each duct a

* Figure 233. From Arey, L. B., 1942. *Developmental Anatomy* (4th Ed.) W. B. Saunders Co., Philadelphia. Locations and relations of the three kidney-types in mammals (semi-diagrammatic). A, Ventral dissection, the left side showing a later stage than the right. B, Lateral dissection.

separate outlet.* The pronephric-mesonephric duct therewith becomes transformed into the male gonoduct (vas deferens or ductus deferens).

In reptiles and birds the allantoic evagination of the cloaca is almost completely absorbed and no urinary bladder is formed, but sac-like formations of the genital eminence and urogenital sinus, which can be extended in males and remain vestibular in females, evolve into organs for intromission and internal fertilization. In reptiles, marsupials and mammals the cloacal end of the allantois has been retained and with the urogenital sinus forms the bladder. The outlets of the ureters continue to empty into it but the outlets of the ducts deferens become displaced to the outlet of the bladder and unite to form the upper urethra and the prostate with muscular and glandular enlargements. In the male, the gonoducts produce evaginations proximally to the prostatic urethra. In the female the male gonoducts degenerate into the vestigial paroöphoron.**

The Müllerian ducts or oviducts in amniotes arise independently of the mesonephric ducts in the urogenital ridge and never serve as urinary outlets. In the female the anterior ends open into the coelomic or peritoneal cavity near the ovaries, forming the fallopian tubes, and the posterior ends become the uterine tubes which open into the urogenital sinus of the cloaca, posterior to the ureters (in fishes, amphibians, reptiles and birds. In the male they degenerate, the anterior end forming the appendix testis and the posterior end form the rudimentary prostatic utricle.

The cloaca is a common endodermal chamber in all vertebrates below placental mammals, into which feces, urine and sperm and/or eggs are extruded. In higher mammalian embryos it becomes subdivided into a dorsal rectum and a ventral bladder and middle urogenital sinus, giving separate outlets for the different products. This includes the evolution of a perineum and the separation of the urethral, vaginal and anal outlets. (Progressive stages in this transformation are found in reptiles, monotremes and marsupials.) Two bilateral pairs of perineal vascular columns, the corpora cavernosa and the corpus spongiosum

* Figure 124, page 179. Shumway, W., 1942. *Introduction to Vertebrate Embryology* (4th Ed.). John Wiley & Sons, New York. Diagram showing relation of urogenital sinus to cloaca in human embryo.

** Figure 276, page 304. Arey, L. B., 1942. *Developmental Anatomy* (4th Ed.). W. B. Saunders Co., Philadelphia. Diagram illustrating the transformation of an indifferent (hermaphroditic) primitive genital system into the definitive male and female types (Thompson).

sum with their covering striated muscles, become separated from the anal and other cloacal organs and form the genital eminence through which the urethra passes longitudinally in the male and between which it passes in the female.

In the mammalian male (M/f hormone ratio) the corpora cavernosa form the main body of the penis, and the two parts of the corpus spongiosum (extending from union in the central tendon anterior to the anus) fuse and envelop the urethra throughout the length of the penis to the meatus of the glans which it forms.

In the mammalian female (F/m hormone ratio) a short urethral outlet from the bladder separates anteriorly from the oviducts. It empties beneath the clitoris, and the outlets of the oviducts form a vagina with a single vulvar outlet. The two pairs of vascular columns and perineal muscles of the genital eminence form the vulva in a manner homologous to the male formation of the penis and scrotum, with certain important differences in relation to the gonoducts. In the female, the male or Wolffian ducts degenerate and a prostatic and phallic urethra is not formed. The female urethra is homologous with that part of the male urethra extending from the bladder to the prostatic outlets of the spermatic ducts. In the female the bilateral corpora cavernosa and their covering muscles are posteriorly separated and unite anteriorly forming the clitoris, whereas the bilateral corpus spongiosum is united anterior to the anus and separates to form the bulbus vestibuli or vulvar opening to the vagina, and reunites anterior to the urethra in the clitoris, forming its glans. The labial folds remain separated in females whereas in males they unite to form the scrotum.

Organization for functional hermaphroditism (M/F) in the gonads, gonoducts and external genitals and somatic organs is common in the lower pronephric vertebrates (Cyclostomata, jawless fishes). In the juvenile stage of the lamprey the gonad is bisexually active, producing viable ova and sperm which are shed into the peritoneal cavity where they find their respective ways to special ducts or pores in the cloaca. Upon sexual maturity the cloaca differentiates in the female a spacious vulvar sac and in the male a long, external, penis-like sac. In amphibians gonochorism with rudimentary hermaphroditism is general but in many instances it develops into functional hermaphroditism.

The sex differentiation of embryonic growth of the gonoducts in higher vertebrates seems proportional to the ratio and quantity of male and female hormones present in the circulation. In species having bi-

potential gonads, like frogs, both male and female gonoducts grow to adult size. In species where rudimentary gonadal hermaphroditism exists, a marked difference in the growth of the gonoducts appears, the one corresponding in sex with the dominant gonad becoming adult and the other remaining rudimentary.

In birds and mammals, where gonadal differentiation has evolved to a more nearly complete domination of one sex with suppression of the other, the gonoducts, external genitalia and organisms differentiate relatively as completely, leaving little more than rudimentary traces on the suppressed side. However, these conditions can be reserved pathologically or experimentally in the embryo.

In male birds and mammals the oviducts are androgenically suppressed early in embryonic development and remain rudimentary. As the lower parts of the male and female duct outlets, forming the copulatory organs, develop from neutral cloacal primordia, all grades of anomalous intersexuality are found here, as well as in the gonads and gonoducts. Immature ovarian and testicular tissue and immature male and female gonoducts may occur with rudimentary or immature male and female external genitalia.

Experimental eliminations and transplantations of male and female gonads and hormonal feedings in reversed ratios to normal, the effects of placental male and female anastomoses in cattle, and the clinical evidence of man from hormone-producing tumors, all have shown that every degree of hypergonochorism to hypogonochorism may exist, with parallel nutrition and growth of the same sex gonoducts and relative suppression of the opposite sex. Such bisexual effects range from sterile supersexuals, through reproductive sexuals to sterile intersexuals, in harmony with or in reversal to the chromosomal sex differentiation.

Double vaginae and double uteri develop from the double female gonoducts in reptiles and lower marsupials, requiring separate intromissions. Later, fusion in the female produce a single vaginal orifice.* This trend progressed until a single vagina developed with a double uterus in the highest marsupials. Fusion at the cervix formed the bipartite uterus found in rodents, carnivores and ruminants. This trend increased, forming the bicornate uterus, found in deer and sheep, and finally evolved with anthropoids into the completely fused, single uterus, retaining bilateral oviducts extending from its fundus to the ovaries.

* Figure 137, page 342. Huettner, A. F., 1941. *Fundamentals of Comparative Embryology of the Vertebrates*. The Macmillan Company, New York. Diagram of Uteri of Eutheria.

The trend of evolution in uterine ducts has been, in general, change in carrying capacity from a large number of low developed eggs to a small number of embryos or fetuses towards increase of capacity for carrying one fetus longer — toward a more extensive state of development of nervous potentialities. In some species, like the horse with the same period of gestation as man, the brain of the fetus is more highly developed as a whole at birth than in the infant, but the basis for postnatal cortical development is greater in man.

Evolution of Bisexual Adaptation with Thermogenesis

Autogenous heat production is an accessory regulatory sex character of particular significance in the evolution of bisexual differentiation. The degree of body temperature, as previously shown, probably more than any other factor, controls and differentiates the metabolic rate and growth of the embryo in cold blooded animals. In birds and mammals both sexes concomitantly develop a great increase in capacity for the regulation of heat production and radiation with vascular constancy against environmental heat variations. It is very weak in the embryos and dependent upon support by parental heat. After birth autogenous thermal regulation increases rapidly, based on a concomitant evolution of protein metabolism as well as the structure of the whole organism, particularly the adrenal cortex, the thalamic and hypothalamic part of the brain and the anterior and posterior pituitary glands and the skin. The adrenal cortex has a minor differentiation from the urogenital ridge in thermally inconstant animals and a major differentiation in thermal constants. It secretes a hormone (cortin) which is more androgenic than estrogenic and the basis for somatic muscle contraction and heat production and skin growth of hair or feathers for regulation of heat radiation. The adrenal medulla, an ectodermal, nervous derivative, regulates the postural tonus of hair or feather muscles and the rate of release of glycogen and red blood cells into the blood, and its vasomotor distribution to working parts for counterbalancing variations in temperature and other imbalancing conditions.

It was previously shown that, in lower, thermally inconstant vertebrates, low temperature inhibits catabolism and favors anabolic dominance of cortical gonadal growth over medullary, producing the ovary, hence secondary F/m characters. Heat accelerates catabolism and favors dominance in growth of medullary cells over the cortical, producing the testis, hence M/f secondary characters. In warm blooded birds

and mammals too high temperature reduces production of ova or sperm, and sterilizes more active spermatogenesis at a lower temperature than ovogenesis. Comparative anatomy shows how the two sexes worked out a fertile solution as auto-thermogenesis increased.

The testis and ovary react differently to high body temperatures, and correlations in the evolution of organs serving heat production and radiation with gonadal differentiation exist. In gonadally nearly equipotential fishes and amphibians heat production through muscle contraction is inconstant and heat absorption and radiation through the skin and respiration is rapid, but the temperature changes in water are slower and not so extreme as in air. Reptiles produce a body temperature of 2 degrees C., to 8 degrees C., above the surrounding air and some species (python) incubate their eggs by coiling around them. Reptilian skin is adapted for heat absorption but loses it rapidly. Thermal regulation grows more constant through tonic reflex somatic muscle contraction and autogenous regulation of the respiratory rate and the vascular supply to the skin and the posture of the hair or feathers. Comcomitantly, erotism of the male grows more continuous and of the female more periodic and less climatically variable, and incubation becomes internal and more independent of environmental interferences. Male chromosomes, androgens and spermatogenesis, and male warm blooded animals have a higher rate of metabolism than females. The metabolism of human adult males is about 1600 calories per day and of adult females about 1400, and when age, size and weight are equal the metabolic rate of the male is higher (Howell). In erotism body heat production increases in both sexes.

In birds the testes and ovaries remain internal but the chromosomal complement is AXXX in males and AAXY in females, suggesting different thermal sensitivity than in mammals where males have AAXY and females AXXX chromosomes. However, sperm production is more active at night in birds when the body temperature lowers as much as two degrees. In prolonged hot weather male and female gametic production and estrus is depressed for birds and mammals. In man and probably other thermally constant mammals undescended testes are sterile and fever inhibits spermatogenesis and may be destructive to germ cells in descended testes (Mills, 1919). High fever in women prevents ovogenesis and high fever in mothers during a vulnerable stage of gonadal differentiation of embryos should be considered as a factor disposing to intersexualism with cryptorchidism in males.

Experiments with the effect of heat upon the functions of testes

have demonstrated the physiological importance of the passage of the testes into the scrotum (Moore, 1939). Here the temperature is from 1 degree to 8 degrees C., lower than the abdomen (rats, rabbits, guinea pigs, man). When the scrotum of a ram was covered with insulating material, early degeneration of all seminiferous tubules of the testes followed. The animal was sterilized by the heat of its own body. Application of heat (water, electric light, hot air, sun's rays) to the surface of a normal scrotum caused severe testis injury. Permanent sterilization of guinea pigs can be produced by exposure for 15 minutes to water 5 degrees C., greater than the normal body temperature. Hellmer's (1944) rats showed marked degeneration of potency in males with hairless, relaxed scrota and reduced fecundity in females, upon living constantly in high temperatures.

It is evident that the scrotum is essential as a temperature regulating mechanism for the testes in estrual higher mammals. Its exposed position and sweat glands and almost hairless skin, and the capacity for relaxation of its muscles in reaction to heat, increasing its surface, and its contraction in cold, decreasing its surface, all contribute to thermal regulation of testis metabolism by radiation and evaporation.

We can now understand the thermal causes for the evolution in external descent of testes. Thermally inconstant monotremes (duck-bill moles) and edentates (sloths, anteaters, armadillos) have internal abdominal testes, like all non-mammalian vertebrates. The first signs of developing a scrotum are found with descent of the testes in pouches of the lower anterior abdominal wall. Whales, porpoises, seals, elephants and rhinoceroses, although warm blooded mammals, do not have scrota, indicating lower thermal constancy. In many rodents a definite pouching or temporary abdominal scrotum has developed, into which the testes descend during the rutting season—the period of increased metabolism and heat production. In higher rodents (rats, guinea pigs, rabbits) the testes are usually in the scrotum but can be retracted into the abdomen through an unclosed inguinal canal. The horse has retained the scrotum in a ventral, pendant position which is often exposed to injury, but it has also retained the capacity for muscular retraction of the testes into the abdomen. In the dog and cat and anthropoids the testes remain permanently in the scrotum.

With the tendency to assume the upright position in primates the inguinal canal becomes closed after descent of the testes into a scrotum. It seems as if the descent occurred under a form of physiologically selective compulsion, concomitantly with the development of greater capacity

for continuous estrus and increased heat production, as well as autogenous, cortically controlled energy projection in the highest mammals. Only those males escaped self-sterilization which inherited genic combinations determining extrusion and descent of the testes. And only those animals which tended towards permanent closure of the inguinal canals could assume the upright posture for prolonged periods without developing inguinal hernias. The development of hernias no doubt impaired the chances of survival in the severe struggle for life and mating.

Evolution of Autogenous Use of Energy in Growth, Work and Heat Production with Reproduction

The evolution of autogenous control of heat production and radiation to counterbalance the absorption and losses of heat in an environment of variable heat naturally involves the physical and chemical evolution of the entire organism and its cellular means of energy intake, storage, release, circulation, projection and waste elimination to maintain a counterbalancing self-determination against all imbalancing forces.

In the transition from salt water to fresh water to terrestrial conditions, life had to develop special organic physical and chemical mechanisms in order to master the quantitative changes in the ratios of all environmental supporting and opposing, physical and chemical energies (gravity, ground resistance, atmospheric pressure, heat, light, humidity, salinity) and capture as much energy as needed for the anabolism and catabolism of growth, work and reproduction.

Vertebrate life seems to have had its origin in hard, fresh water estuaries and rivers as chemical evidence indicates, and not in the sea as fossils indicate (Baldwin, 1937). It was able to migrate back to the sea through secondary mesonephric modifications in teleosts and elasmobranchs. With the evolution of the encased egg, amnion and metanephros, and lungs through evagination at the dehydrated and inflamed end of the oesophagus, accompanied by atrophy of the gills and facial transformation of the gill slits, and compensatory changes in the blood and blood vessels and heart for respiration, vertebrates (lung fish to amphibians to reptiles) mastered atmospheric dessication and invaded the land—highly variable in heat, light, moisture and salinity but rich in plant and insect foods and oxygen.

In plants and animals, each species attains maximum growth and reproduction when supported by the right qualitative and quantitative environmental conditions, to which it most easily physically and

chemically equilibrates itself. Increases or decreases in any factors that persistently imbalance any parts of the sensitive ratios of anabolism or catabolism soon change the pattern of cytoplasmic adaptation or growth, and more or less interfere with environmentally timed maturation and placed mating for reproduction until counterbalanced by organic changes. In animals and plants the range of adaptation for reproductivity is considerably less than for viability hence more important in evolution. The limitations of natural selection are broader but indivisibly related to sex differentiation, as shown by the ratio of surface to contents in reaction to environmental temperature and its effects on viability and reproductivity. Plants make a long, slim, phototaxic growth with ample heat but reduced sunlight, and become less reproductive. With adequate light they make a stronger, more compact growth with radiations for maximal absorption of light in relation to maximal growth and reproduction. Hellmer's (1944) rats, like other animals, tend to develop the long, thin bone and body growth with lower viability and reproductivity under excessive heat and humidity. This is no doubt an increase of surface for heat radiation with reduction in ratio of the heat-producing interior and reduction of metabolism. A shorter, more spherical growth in cold reduces the ratio of surface to interior and is accompanied by increased viability and reproductivity with increased metabolism.

Heat was produced in better balanced ratios, in relation to absorption and radiation, through circular, somatic-kinesthetic, neuromuscular integrations in all reflex levels working to maintain a self-controlling, right side up posture and movements against gravity and other forces (Kempf, 1918, 1935). Therewith evolved in its support more active, circular, autonomic-emotional neuromuscular integrations in all reflex levels with hormonal means for regulating the rate of heat production through vascular distribution and radiation through cutaneous and pulmonary, alimentary and renal surfaces. Through the cutaneous evolution of scales into erectile hair or feathers, and of sweat glands, the rate of surface heat radiation became quickly and greatly increased or reduced under autonomic nervous control. These organized functions counterbalanced the increase and decrease of heat production in work and estrus and emergency emotional excitements, in rest and in the variation of temperature, humidity and pressure of the atmosphere above or below the equilibratory mean of the organism. Such decisive changes in physical and chemical interactions were accompanied by many supporting secondary changes in the physicochemical constitution of

the blood plasma and cells, the ratios of endocrine secretion, digestive system, liver, kidneys and many sense organs, and the chromosomal and cytoplasmic constitutions of their cells.

The organism's capacity for immediate acquisitive-avoidant evaluation and adjustment to environmental conditions is based on its attitude (Kempf, 1935, 1945). This is built up through somatic-kinesthetic neuromuscular work to maintain well balanced postures against gravity and other forces, including quick variations in supporting and helpful or opposing and dangerous social and other conditions, and against heat or cold, supported by adequate, autonomic, cardio-vascular-respiratory-hemodynamic energy releases and pressures with counterbalancing vasodilations in active organs and vasoconstrictions in others. The *feelings* in man of such reactions stimulating visceroreceptors in the autonomic smooth-muscular system of skeletal and visceral organs are called *emotions*. They are representative of the quality, quantity, time and spatial form and locus of the cravings. No doubt they are comparable to equivalent conditions in other vertebrates. Since they generally indicate an imbalanced variation of hypertension or hypotension from rest, and compel work to get what is needed to restore internal with external equilibrations, they constitute *emotivations*.

All vertebrates and probably all invertebrates, including insects, show, in both sexes, marked increases in the anabolic constitution of different tissues and organs preceding the mating season and marked increases in catabolic energy releases during the mating season in display, attraction and excitation of mates and in driving off rivals and in feeding and protecting young. In most, if not all, species the catabolic ratio is stronger in males than females, as the great reduction in weight and excess of aggressiveness shows.

Many invertebrates and aquatic vertebrates and probably all terrestrial vertebrates, including man, use similar autonomic and somatic emotional attitudes in mating and other situations. They are differentiated in reaction to the strength or weakness of the opposing and supporting environmental forces. They include the *depressive*, *dystonic*, cardio-vascular-respiratory-hemodynamic energy reductions with lower blood pressure and smaller, often irregular, cardiac contractions and inspirations and hypotonic somatic submissions to stronger, unavoidable oppositions: the *fearful* excitement of painful hypertensions and compensatory cardio-vascular-respiratory-hemodynamic emotivations, such as small, very fast, cardiac contractions and inspirations with general vasoconstriction, feelings of coldness, increases in blood pressure, blood

sugar, adrenin, etc., and compulsions of avoidant somatic work against pain and injury by stronger, avoidable oppositions, accompanied by the reflex conflicts of *anxiety* type upon indecision between flight and fight; and *raging* excitement of painful, compensatory, larger and stronger but less fast cardiac contractions and inspirations with high blood pressure and full vascular tumescence and strong releases of energy into the blood stream with feelings of increased heat and somatic compulsions to overcome and eliminate oppositions in defending self, mate, young food or territory; and the excitement of a *loving* or *eutonic*, full, slower cardio-vascular-respiratory-hemodynamic acquisitive emotivation with adequate volume and pressure of circulation and respiration to support well balanced somatic work and free, courageous displays in mating, leading to the protection of cooperative mate and young and the exchange of rhythmic movements and pleasurable attentions.

Comparative psycho-physiological evidence amply indicates that in young vertebrates the autonomic emotivations are more violent and the regulation of heat production is more inconstant. They are at first loosely graded to support quickly the inadequate patterning, timing placing and grading of energy-projicient somatic work to counteract reflexly the quick or surprising increases and decreases in special kinds of environmental supporting and opposing forces of all kinds.

It is therefore consistent that the same autonomic neuromuscular and neuroglandular systems, useful for emotivation and energy distribution to antigravity working organs in thermally inconstant aquatic vertebrates, should have evolved in terrestrial vertebrates, with greater antigravity work, the additional capacity for the regulation of heat production and radiation. This produced greater constancy of autogenous equilibration against environmental extremes of heat and cold for the control of sex differentiation and reproduction as well as for self-preservation. In mating, the vascular emotional pressure of energy is excessive and energy is used up in males and females in active sex seeking, exhibitionism and mutual erotogenic excitation, ending generally in highly specialized or limited sexual selections and the elimination of weaker male or female rivals. This indicates, contrary to the Darwin and Wallace evaluations, the greater potency of reproductive emotivation and sexual selection over other forms of natural selection in evolution. Hence the emotional conflicts, malconditionings and displacements of man, who lives largely in the unavoidable family and working situations, are profound determinants of his growth, viability, repro-

ductivity, health and disease; and his greatest emotional conflicts generally develop in relation to repetitious frustrations in specialized reproductive compulsions.

The reproductive cycle is naturally dependent upon the climatic cycle for thermal and nutritional support, hence it must be thermobidynamically so constituted as to react fittingly to the increases and decreases in heat and light that naturally attend the annual and diurnal changes in solar effects. It has been found that the mating drive moves primarily in rhythmical, pituitary-gonadal cycles, under heat and light (solar and lunar) directive increments and decrements, with secondary emotivating, cardio-vascular-hemodynamic, genitally convergent excitements. The gonadotropic hormones are secreted by the anterior pituitary gland. When the ratio of pituitary gonadotropic hormones in the blood increases, gonad hormone production is increased. As gonadal hormones become excessive the pituitary secretion decreases, and as gonadal hormones grow deficient the pituitary secretion increases. This counterbalancing, interactive, rhythmic cycle directly or indirectly involves all the other endocrine glands and organs of the body, producing the flood tide of anabolic growth and energy accumulation of winter in preparation for the flood tide of catabolic energy release of the mating season in spring and the anabolic and catabolic ebb tide of the molting season in the excessive heat of mid-summer.

As heat becomes excessive in July and August, northern hemisphere adult birds and mammals undergo an inhibition of the pituitary and the metabolic heat-producing activities, and breeding ends and molting begins. With the late autumnal decline of heat general pituitary tropic activity increases and early in winter many birds and mammals develop sex differentiated skin, genital and other tissue growth that shows a revival of gonadal activity. This activity is, however, generally not adequate for erotogenesis, except in fall breeding, spring parturiant ungulates and other animals because of the decline of the indirect effects of visual stimulation by light upon the pituitary. It has been found that many species of birds and mammals (raccoons, mink) of the temperate and frigid zones, upon exposure in this state to slight increases of artificial light daily for several weeks, increase further in pituitary and gonad secretion and become erotic. In birds mating is excited and migration inhibited. Naturally, the severe cold of winter destroys out-of-season adaptations of reproduction and tends to eliminate the more precocious and the constitutionally weaker organisms. These same solar

influences upon reproductivity still apply to an important extent to primitive and civilized man, as will be shown in the next paper.

Each organism in its individual development must grow up in the sequence of primordial patterns laid down by its ancestors, before it can complete its own bisexual differentiation of attitude. In the cortically dominant primates autogenous recapitulation must be conditioned by self-determination in learning, through social experimentation, for each step. Thereby the ego-attitude passes through hermaphroditic, narcissistic autoerotism, to hermaphroditic, narcissistic intersexuality or homosexuality. Thereby only is mature, socially conditioned heterosexual differentiation of the ego-attitude for mating achieved.

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PSYCHOLOGICAL ASPECTS OF SURREALISM

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Man can have three types of experiences — perceptive, imaginative and hallucinatory (as in a dream). The artist utilises material from all these worlds in his creations, choosing according to the needs of the particular occasion, and from the purely artistic standpoint there should be no question of the “superiority” or “inferiority”. The surrealists, however, maintain that oneiric values should succeed all others, which lays them open to the accusation of attempting to establish a subrealism rather than a “surrealism.” Had the oneiric world been completely neglected hitherto, there would have been some justification for their attitude, regarded as a reaction against an exclusive absorption with the perceptive and imaginative worlds. But if the great artists are considered, such an excuse could not be brought forward. In literature, for example, Dostoevsky (whom we have always been content to call a great realist) frequently makes use of both oneiric and the waking hallucinatory states when artistic needs demand this, but he also concentrates on the other types of experiences, giving us worlds where reason and sublimation occur, as well as unreason and regression. Be it further noted that such dreams as Dostoevsky introduces are not mere “copies”, but artistic creations, they are significant, not inchoate.*

The cause of the surrealists' obsession with the oneiric world lies therefore elsewhere. Starting from Freud's discovery that the main-springs of artistic inspiration reside in the unconscious, they have proceeded to worship this portion of the mind with an almost religious fervour, and dreams, being the “royal road to the unconscious”, naturally receive an appropriately sacred value. When we recall the mechanism of dream formation — how the unwelcome wishes are disguised by symbolism, dramatisation, displacement of affect from one person or situation to another, condensation, substitution of things or ideas by similar

* Take, for example, Raskolnikov's Dream of the mare, or Svidvigailov's Dream before he commits suicide, in *Crime and Punishment*.

ones or opposites, distortions of infinite variety — and that considerable knowledge of the dreamer's past history (adult, childish and infantile) is required before the "latent" content is fully uncovered, we begin to understand why so many of the surrealists' works appear utterly incomprehensible to the average layman. When we remember further that similar dreams may hide different latent contents for different persons, and also that identical desires may be camouflaged in different ways, the task of finding a "meaning" to the dream of a person concerning whom we know nothing becomes Herculean even for the psychoanalyst. Sometimes the artist may be kind enough to give us a hint. For instance, Mr. Jennings explains the presence of a jam-roll in his *chef d'oeuvre*, "Life and Death", as the result of a "personal fixation" and for that reason it no doubt possesses a profound emotive significance for him. Unfortunately a "jam-roll fixation" (unlike the oedipus complex) is not a universal possession; the spectator with a suet pudding or other fixation is left cold. Here it would be well if surrealists remembered what Freud himself has written concerning art: "First of all he (the artist) understands how to elaborate his day-dreams, so that they lose that personal note which grates upon strange ears and becomes enjoyable to others; he knows too how to modify them sufficiently so that their origin in prohibited sources is not easily detected." In other words, a work of art must possess that *sine qua non* — universality of appeal.

The surrealists are disgusted with "vulgar reality", but the mere copying of a dream cannot be considered artistically superior to the copying of objective reality.* Fascinated by the goose which lays the golden egg — the unconscious — the surrealists appear to think that this domain of the mind is like an oil well which can be bored into at will in order to bring forth artistic creations.** Gascoyne informs us that "all that is needed to produce a surrealist picture is an unshackled imagination . . . and a few materials: paper or cardboard, pencil, scissors, paste, and an illustrated magazine, a catalogue or a newspaper. The marvellous is within everyone's reach", and since "the marvellous is always beautiful" (Breton), we seem to possess here a very easy recipe for the creation of beauty. But, alas, beauty cannot be created in such a comparatively simple manner, even when full use is made of a knowledge of the unconscious and its mechanisms. Not that the most subtle psycho-

* Of course the true artist never copies *anything*; he creates.

analysis has explained the mystery of artistic creation. Freud, after having brilliantly analysed Da Vinci's unconscious, has to confess that the problem of this artist's genius remains unsolved. In his own closing words: "The two characteristics of Leonardo which remained unexplained through psycho-analytic effort are first, his particular tendency to repress his impulses, and second, his extraordinary ability to sublimate the primitive impulses . . . The tendency to repression, as well as the ability to sublimate, must be traced back to the *organic bases** of the character, upon which alone the psychic structure springs up. As artistic and productive ability are intimately connected with sublimation we have to admit that also the nature of artistic attainment is psycho-analytically inaccessible to us." This should dispose (for good Freudians at least) of the futile automatic writings and other parlor games designed to shake the unconscious mind with naive object of accidentally dislodging a nugget of art. One of the more recent tricks of the surrealists is to simulate various types of insanity. At one time the mistake was made of regarding the genius as insane. The surrealists now commit the opposite error, they think that inspiration will result if insanity is acquired, even though temporarily. These and other "researches" of the surrealists produce interesting clinical material for the psychologist and psychiatrist, but unless inspiration is present the result is not art; and if the *organic* basis of genius is possessed by the individual, then inspiration occurs without any deliberate plan of attack: Rembrandt and Cézanne managed to paint originally without a knowledge of psycho-analysis.

Though the impelling forces of artistic creation undoubtedly reside in the unconscious, and exhibit their eruptions without or even against the conscious will, it would be going against the known facts to assert that these powers account for the whole of art. There must have been many individuals in Greece who suffered from an unresolved Oedipus Complex, but only a very few (Aeschylus, Euripides, Sophocles) created the literary works of genius based thereon. Apart from inspiration, which is essential, there are other factors concerned in the completion of a work of art, viz. the use of the conscious reflective activities in the selection, combination and elaboration of material.

*My italics.

**I am aware that my metaphors are mixed, but this is perhaps not inappropriate in an article of surrealism.

Admitted that such conscious activities are in the main unconsciously motivated, yet they belong to the sphere of conscious reasoning in the ordinary sense of the phrase. The example of Coleridge creating *Kubla Khan* in a dream state is a rare event, and for this reason is often quoted. Goya, who was not inferior to any of the surrealists in the creation of grotesque fantasies, knew also more about the essence of great art; he wrote: "Imagination without reason produces impossible monsters; with reason it becomes the master of the arts, and the source of its marvels." The merely bizarre, grotesque or incongruous, however extreme, are not in themselves signs of greatness in a work of art. The painting of a cat with saddle on its back is not bad art because the combination is incongruous, any more than a similar picture of a horse with a saddle on its back is necessarily good art because the combination does happen to be congruous but cannot be summarised in any single formula.

The unconscious, however, is not only the determining factor in art, but also in errors of speech, puns, obscene limericks, the outpourings of mediums, the discovery of "surrealist objects" and all sorts of other trifles. Not everything welling from the unconscious is art — a fact which the surrealists sometimes forget. With a determined concentration on the unconscious, the surrealists wish us to become absorbed in the uttermost depths of the mind. But what do these infantile layers of the mind contain? They are replete with our infantile experiences of the first five years of life — with such activities as thumb sucking, handling of faeces, playing with the genitals, destructiveness and cruelty. Whilst an exploration of this region may prove helpful to those who are suffering from neurotic symptoms, it is puzzling to see how art or life is going to be advanced for the majority of the individuals by an exaggerated attention to this region of the mind. We are promised a recapture of the "best of childhood," but whether such a mode of attaining this end can succeed, and whether in any case the prime duty of art is to recapture such a state, is at least debatable. What the deification of the unconscious does lead to definitely is a quite unjustified worship of the works of de Sade, Baudelaire, Lautréamont* and others who, owing to some

*I leave the reader to judge the artistic value of this "genius" of the surrealists from the following extract.

"On doit laisser pousser ses ongles pendant quinze jours. Oh! comme il est doux d'arracher brutalement de son lit un enfant, qui n'a rien encore sur la lèvre supérieure, et, avec les yeux très ouverts, de faire semblant de passer sauvagement la main sur son front, en inclinant en arrière ses beaux cheveux! Puis, tout a coup, au moment où il s'y attend le moins, d'enfoncer les ongles longs dans sa poitrine molle, de façon qu'il me meure pas; car, s'il mourait pas plus tard l'aspect des ses misères. Ensuite on boit le sang, etc."

constitutional or psychic peculiarities were compelled to satisfy various powerful unconscious trends with the appropriate phantasies.

The insistence on the "superior reality" of the unconscious, the desire to make oneiric values succeed all others, the rejection of reasoning processes, all mark the surrealist movement as a form of subjective idealism. When, therefore, the surrealists subsequently engrafted the anti-idealistic Marxian system of thought, and began to throw themselves into practical life by associating with the communist movement, the results were far from happy. I need only point out the more important and glaring contradictions:

Thought must be dictated outside all aesthetic or moral preoccupations — one must not forfeit the burning desire for beauty, truth and justice; one must affirm the omnipotence of the dream and the disinterested play of thought — one must deepen the foundations of the real and be intensely interested in the proletarian revolution; one must accept the superior reality of the dream and of the paranoid mode of thought — one must attain a clearer consciousness of the perceptive world; one must reject all control exercised by reason, but this does not prevent a "reasoning epoch" in surrealism from arriving. These antinomies of the idealist and realist viewpoint cannot be resolved, and it is significant that at the Congress of Soviet Writers (1934) it was "socialist realism" and not "surrealism" which won the day.

Further, the alliance with dialectical materialism did not prevent surrealists from turning back to their original idealistic principles in 1930, when Salvador Dali announced that the objective world must be discredited by a paranoid mode of thinking. He insists on the reality of the idea (whatever it may happen to be) rather than on the reality of the objective world, which is to be regarded as unstable, if not quite suspect. If the idea is in utter contradiction with the external world, so much the worse for the latter! What becomes here of the dialectical unity of theory and practice? Dali wishes children to cultivate the habit of changing one object into another by looking at it fixedly; for instance, the poor child of the slums could change margarine into butter, and even taste it as butter. That this can be attained in suggestible subjects is an indisputable psychological fact, but such accomplishments are surely at variance with the opposite principle of the surrealist faith — the desire to change the objective world, so that the slum child may get real butter instead of margarine. If indeed, the surrealists desire to change the world, one of their first steps should be an attempt to understand its objective nature, instead of misrepresenting it

by "voluntary hallucinations" or paranoid modes of thought. I must here add one example of the falsities that inevitably follow their paianoid procedure, as I am able to refute them from personal experience. Breton attacks the doctors of mental hospitals, referring to them as "gaolers and indeed as purveyors of penal settlements and scaffolds." In brief I can reply that (1) a considerable proportion of mental patients reside on a voluntary basis and therefore cannot be regarded as gaolled, and that of the certified cases many dwell in open villas; (2) punishment in any shape or form is illegal; (3) I have never heard of or seen anything resembling a scaffold (realistic or symbolic) in any mental hospital in England or abroad. It seems that Breton wishes our helpless schizophrenics and homicidal paranoiacs to roam about at large—the surrealists inherit the desire of "shocking" us from their predecessors, the dadaists.

All this confusion in the surrealist philosophy need not, however, prejudice one against admiring any artistic merits that the works of surrealist painters or sculptors may possess. In spite of their insistence against the judgement of their productions by the objective methods of considering line, balance, colour, proportion and so forth, this is how ultimately the aesthetic value of their works will be assessed. As regards the imaginative content, as in every age, there are bound to be great differences of opinion. In some persons, as in Breton, the image of an umbrella and sewing-machine meeting accidentally on a dissecting-table will activate an aesthetic thrill; others will remain indifferent — *de gustibus non disputandum est*. I only wish to stress that the surrealists' conception of beauty is a purely subjective one. In the truly romantic fashion they ignore the value of the voluntarily imagined design of an artist, relying exclusively on the feelings awakened in the spectator. Breton maintains that such feelings belong to the erotic category, and may be experienced in the presence of a work of art, a living person or a spectacle of nature. Here again we see the supremacy of unconscious complexes being invoked, but we are perilously near the judgment of the Philistine who, without being able to give reasons, claims that he "knows what he likes or dislikes". How indeed could one give reasons under circumstances where beauty is judged by the object's power of reviving unconscious erotic situations rather than by formal qualities. Since each of us has undergone different types and combinations of infantile and childish experiences it is obvious that an assessment of beauty, if one relied solely on the erotic feelings awakened through unconscious associations, would vary considerably in different individuals. The surrealist faith cannot therefore become a basis for a

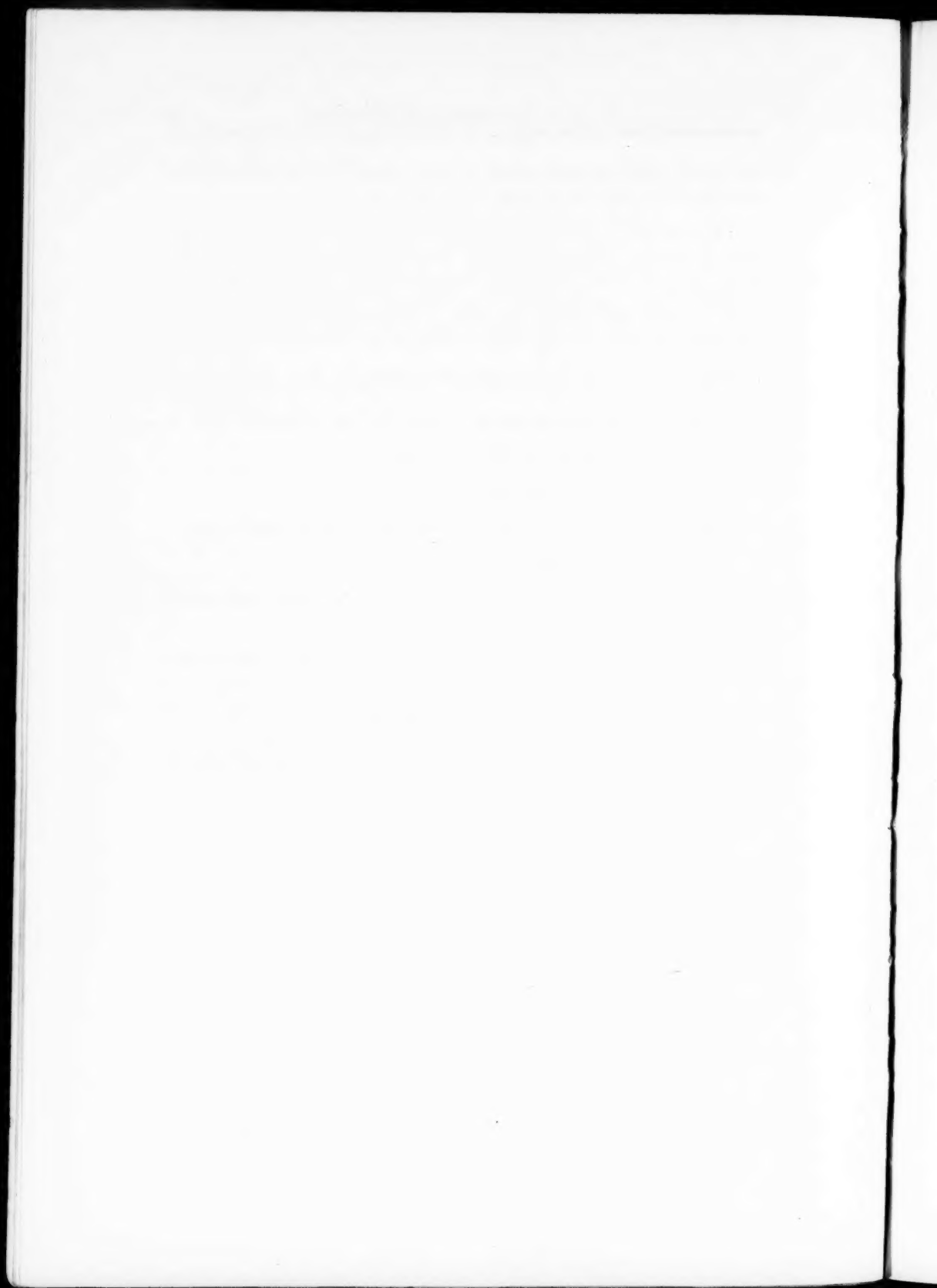
universally valid aesthetic, which requires that the objective as well as the subjective points of view be taken into consideration.

In conclusion, and as an illustration of the fatuity, from the artistic point of view, of productions which are motivated by peculiarly personal complexes but are not rendered universally significant by conscious effort, I would quote some "proverbs" which occurred spontaneously to one of my neurotic patients when waking up in the morning:-

1. The visibility where it branches off to London is quite nicely wound.
2. A mixture of gas and oxygen or a wet cloth and sewing machine.
3. The exquisite boredom of the ether bottle.
4. Alarming individual keys but not narcotic.
5. Relax when there is nothing near you, cricket never ends in tears.
6. Do you ever shed your eyelids?
7. Paris is premature, an idea in my mind even the Police have noticed it.
8. Sterilized barbiturates before decisive interests. [Their resemblance to the similar effusions of some of our surrealists is striking; but although, with analysis, they became significant (for the patient), they could hardly be regarded as artistic creations that could have any universal appeal. The same argument holds for the surrealist efforts in the spheres of painting and sculpture.]

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SADISM AND MASOCHISM IN HUMAN CONDUCT

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PART IV

Chapter III. The Obsessive Neuroses (Continued)

THE EGO

We must note especially the fact that the libidinous relationship of the patient to his sexual object assumes strange forms as a result of regression. Instead of feeling love and affection toward the sexual object, he develops desires of defiling, dominating, martyrizing, killing it, or, the reverse, of suffering this treatment to be inflicted upon him by the sexual object. A normal individual would be repelled by this kind of sexual impulses and, if such desires existed in him, would attempt to overcome them and try not to satisfy them. The *ego* of the obsessive patient conducts itself in this very manner. It reacts by attempting to direct its strange instinctive desires into more normal channels.

Toward this end the ego of the obsessive patient makes use of *measures of defense against the instincts*, analagous to those that occur in other neuroses and also in the development of the normal individual. But, in the obsessive patient, because of the influence of regression, and through psychic incorporation of conflicts and, also, by reason of certain characteristics of the ego, these defense measures take on special aspects which differ from those found in the hysterical patient.

Repression is the best known of all these defense mechanisms. Psychoanalytic examinations of obsessive neurotics show that the strength of ego repression does not usually reach the intensity which it attains in hysterical patients. In fact, in the course of the psychoanalytic treatment of the obsessive neurotic, many components of the Oedipus Complex are uncovered, which are usually strongly repressed in other neurotic individuals and in normal people. Thus, the patient frequently recalls having had active sexual desires directed toward the mother or hav-

ing dreamt sexually about her. In exchange, the same patient, because it is more disagreeable to him, usually represses the negative side of his Oedipus Complex, namely, the passive homosexual desires toward the father.

In the struggle against the disagreeable manifestations of the instincts, it is characteristic of the obsessive neurosis, that the ego of the patient, employs the defense mechanism of isolation instead of repression. This mechanism consists of an effort to destroy the psychic connections uniting a disagreeable component with other psychic elements.

For the above reason, it comes to pass that, if the patient recalls part of his Oedipus Complex well, he gives it little value and erroneously assigns little importance to it. He regards it as transcendental in his psychic development. At the same time, since the ego also succeeds frequently in isolating the affects produced by the Oedipus Complex from the remainder of his personality, such components manifest themselves in the patient's consciousness with slight intensity, apparently without trauma, and also without influencing the rest of his psychic apparatus.

Toward the same end, the ego of the obsessive neurotic attempts also to avoid those external stimuli which revive the affective intensity of the isolated psychic components. As a result of the fact that the influence of regression is added to that of isolation and of the avoidance of affect, the characteristic obsessive ideas come to the fore. A patient can, for example, coldly harbor the obsessive thought of stabbing his mother, or any mother substitute such as a female servant, with a knife.

In psychoanalyzing this symptom, we reach the conclusion that the idea of stabbing with a knife is a regressive expression of the genital act, in which the knife has a phallic significance and, the act of stabbing, that of coitus. Then, by relating this obsessive idea, in the course of treatment, to a fantasy of coitus with the mother which the patient had during the puberty period and which he now recalls, the psychoanalyst succeeds in diminishing the strength of isolation. The patient thus comes to include his previously repulsed instinctive tendencies in his psychic apparatus, with the intensity and affective importance which they should have, and this contributes to the disappearance of his neurosis.

The isolation of the obsessive neurotic becomes effective, not only as a method of dealing with his instinctive manifestations, but also with other psychic components, such as those produced by that psychic impotency currently characterized as conscience and which psychoanaly-

sis calls *superego*. From this results the fact that the obsessive may feel disturbed by a vague emotion of culpability, without knowing where it comes from. This is because he does not relate it to certain manifest or latent acts of sadistic value, which he often commits, under various pretexts, for example, towards his immediately family. Thanks to his unconscious force of isolation, these acts do not appear to arouse the least feeling of blame in him and he therefore attaches no importance to it.

According to Freud, the genetic prototype of the psychic process of isolation is the primitive taboo of contact which prohibits the touching of anything that has sacred or dreaded significance. In this regard, the following psychic development may be assumed. At first the contact taboo must have been of a physical nature such as the actual touching of a chief of the tribe and it must have had the latent significance of avoiding hidden aggression. Later there evolved the practice of also avoiding visual contact from a distance as illustrated by the existing prohibition against looking at their rulers among certain peoples. Finally the taboo was extended even more and was carried to the extent of the prohibition of psychic contact by means of thought, as illustrated by the prohibition, among the Jewish people against pronouncing or even thinking of the name of their God. This greater and greater extension of the contact taboo is analogous to the process of generalization of a symptom which occurs very frequently in the obsessive neurosis and which will be studied later.

The ego often employs a defense mechanism, known as the *reaction formation*, against the anal-sadistic tendencies. It brings about a reaction formation by strengthening one of his character traits which is opposed to the anal sadistic tendency which he wants to repulse. Thus it struggles against the aggressiveness of the *id* by becoming converted into compassionate and just *ego* or one motivated by other apparently humanitarian feelings. Similarly, it reacts against the anal tendencies by the cultivation of its characterological traits of cleanliness, order, firmness, or economy.

However, the development and maintenance of such reaction formations, requires constant effort on the part of the ego, since the repulsed tendencies also fortify themselves constantly by coming to the surface as they are, without wanting to be submitted to modifications. For this reason, they succeed frequently in manifesting themselves in spite of and even under the protection of the reaction formations which the ego created in order to subdue them. We are here dealing with some-

thing very typical of the obsessive neurosis which forms part of a general psychic phenomenon, called the *return of the repressed*, which is easily demonstrated both in the individual and in social life.

Thus, some people find outlet for their inherent sadism under the conscious motivation of exaggerated concern that nothing evil should happen to their children—a reaction formation. Thus, they are excessively preoccupied with them. They limit their liberty, prevent them from leading a normal, sane, and happy life, and stop them from playing with other children. The same type of reaction formation often occurs in social life, as, for example, when, under the pretext of protecting the ideals of justice, atrocities have been committed against isolated individuals or against neighboring or distant peoples.

Reaction formations also are found in the hysterical patient but they are limited to the method of ego reaction to certain situations and are not extended to all behavior. In other words, they do not give rise to character transformation as in the obsessive. For example, a hysterical woman, with a latent hate for her husband or son, masks it with a reaction formation of excessive solicitude and worry each time that the husband or son is late in his daily homecoming. The underlying hate and repressed desire that the person in question should not come home at all, are very evident in such behavior and signify a wish of death directed toward him. But, that same patient behaves in a practically normal manner with other people which is not the case in the obsessive neurotic.

In summary: the obsessive neurotic cultivates characteristics of cleanliness, goodness, and other analogous characterological traits, by reinforcing his ego through the creation of reaction formations designed to defend himself against his instincts. He also tries to avoid speaking of money and is usually incapable of committing direct aggressions. Also, he does not usually accomplish those things which can be put aside in his actual social life.

All this can be carried to absurd lengths, which is also typical of the obsessive neurotic. This was the case in one obsessive patient who ate very little in order to have few defecations and so that when he died, his corpse would be small and the decomposition of the corpse would be at a minimum.

In all cases of obsessive neurosis, in spite of reaction formations, the latent instinctive organization is usually manifested in acts which are symbolic of anal and sadistic components. These, when confronted with those originating in the reaction formations, lend confusion to the con-

duct of the obsessive making it appear contradictory or illogical, and giving his personality a very characteristic aspect.⁽¹⁾

The patient mentioned above who had developed the reaction formation of not eating against his analty, didn't even wash himself. His whole body was covered with filth, which unconsciously was a profound satisfaction of an anal type.

A typical type of behavior of the obsessive neurotic, which results from the struggle of his *ego* against the instinctive tendencies, is the *symptom in pairs* or *paired symptoms*. The patient first does something with a certain latent significance, such as repeatedly washing his hands as a method of avoiding a desire to masturbate or, still better, getting rid of a stone or a piece of glass in the road, as a means of defending himself against a sadistic impulse. Immediately afterwards, he does something else with a latent significance which is completely opposite to that of the previous act, such as, for example, taking the genital organs in his hands, or returning to put the stone back in the middle of the road. From both acts of a *symptom in pairs*, the obsessive neurotic can first experi-

(1) In the field of psychosomatic medicine, Flanders Dunbar (*Psychosomatic Diagnosis*, Hoeber, New York, 1943, pages 248, etc.), has characterized the hypertensive cardiovascular cases as obsessive personalities, precisely because of the conflicts which they show between the reaction formations and the latent feminine passivity. These patients constitute a homogeneous group of individuals, with psychological traits peculiar to themselves and important differences from other cardiovascular patients. They usually have a high percentage of previous illnesses but have suffered few accidents. In the majority of cases they have introverted personalities. They present compulsive characteristics and when they express their feelings they do so in an explosive manner. They have tendencies toward perfection, which go hand in hand with obsessive doubts and also with the fact that in difficult moments they have recourse to "wine, women, and song." On the surface they appear to be normal except for signs of effort and anxiety, which are very apparent in their facial expression, and generalized tension of the musculature. Almost all such patients are married and have a number of children. They are very ambitious but fear that they will not be able to maintain their position and are frightened by responsibility. They are timid and conventional except when they do not control themselves. They love to discuss their personal problems, and feel satisfied and refreshed if they receive social approbation. The basic conflict in them is between the effort to identify themselves with persons of authority and the contrasting situation based upon the desire to remain in the infantile state. Thus, they suffer from an intense antagonism between their active and passive tendencies. They are ambivalent and express doubts concerning their every action, and in their conversation. When their hypertension is revealed to them they again show their ambivalence and react with exaggerated fears and also, with relief, since they now have still another excuse for their disturbance. Such "alibiology" is very evident in these patients. Well-carried out psychotherapy succeeds in reducing the arterial pressure to a normal level. During his treatment, the doctor must avoid increasing the patient's conflict between activity and passivity.

ence that which has the significance of instinctive satisfaction and the opposite. Thus, as in the previous cases, contrasting symptoms can occur.

During a psychoanalytic session, a patient explains that she was singing certain types of songs with one of her male relatives, the previous night. Then she relates that she feels a pain a tooth and that she is determined to go to her dentist for a consultation. The psychoanalysis of these two occurrences reveals that they constitute a disguised example of a *paired symptom*. In effect the singing of certain songs in the company of a man, the first occurrence, had the significance of committing a sexually prohibited act. For this reason, the patient immediately presents, in the form of the proposition of going to the dentist, a compensation for the punishable act, which constitutes the second part of the paired symptom. Furthermore, since the initial act had been committed by singing, or in other words, by making a forbidden use of the mouth, it is precisely that organ that must suffer the punishment. For this reason the second part of the symptom takes the form of resolving to have the "evil" existing in the mouth, treated by the dentist.

The symptom in pairs forms part of a more extensive behavior pattern of the obsessive neurotic which is designated as *revocation* and which is also a mechanism by which the *ego* defends itself from the instincts. It consists in the performance of an act which has the manifest or symbolic significance of making another previous act lose its importance or value. We are now discussing a form of behavior which, just like the other defense mechanisms already studied, occurs also in normal persons, but which is more outstanding and is found more frequently, in the obsessive neurotic.

Thus, the taking of a medicine or overeating may have the significance, in a patient, of revoking or invalidating the assumed "sin" incurred by the genital act. The performance of muscular exercises in order to fortify the organism in the struggle of the *ego* against masturbation, has the same symbolic value. The psychic process of *revocation* occurs primarily in response to anal sadistic drives, as, for example, in the case of a father or husband who, after having behaved sadistically toward his child or wife, gives them some caresses to make up for his previous conduct. Socially, the act of revocation can be demonstrated in many customs such as the practice in various regions during past centuries of giving complete liberty to the slaves for one day in order to "revoke" or "invalidate" the severe and cruel subjection in which they are held in the remaining days of the year.⁽¹⁾

(1) According to Lewin, anal regression permits the obsessive patient to overcome better his castration anxiety. In effect, the fear of losing the feces is substituted for the fear of losing the penis, since the former is more easily tolerated by the ego because the excrement is renewed daily and, therefore, its loss is only temporary.

In the obsessive patient, the symptom in pairs and the mechanism of revocation are usually procedures of a magical type which are adopted to struggle against determinate acts. This explains why they lack logical significance, which distinguishes them from isolation which is, in a certain manner, rational.

Thus, the frequent symptom, in the woman, of reclining with the lower half of her body completely immobile, during the entire psychoanalytic session usually has the significance of magically revoking the previous occurrence of sexual relations or masturbation. In one obsessive patient the scrupulous ordering of the household and particularly the bed in which she had had sexual relations, also signified the magical revocation of what had happened during the night, as far as others and she herself were concerned.

As we continue with the examination of the typical aspects of the behavior of the obsessive neurotic, we must mention still other processes of defense against unconscious tendencies. These are known as *generalization* and *displacement toward the inconsequential*. These processes strongly influence the psychogenesis of obsessive symptoms. The attempt, on the part of the patient, to perform an act or to keep himself from doing so, results in a gradual extension of symptoms, each time, to more and more insignificant acts, in some manner related to the first.

One patient, as a result of his struggle against masturbation, did not permit himself to touch his penis. He later prohibited himself from touching knives and still later he even avoided touching any object at all which happened to be elongated in form. In this behavior is shown how the prohibition was displaced from one object, the penis, to another which symbolized the first, but, each time, the second object was more remotely related to the first. This served to disguise the disagreeable psychic elements for the patient.

Another obsessive patient also prohibited himself from touching his genital organ in the course of his struggle against masturbation. (This prohibition was very strong because his genital excitation was tied up with fantasies of a homosexual type with reference to his brother). Later, he was prevented similarly from touching his nose, unconsciously because of the fact that this is the organ which, at least in cases of neurosis, has a phallic significance. It is worth mentioning that he also displaced his castration

Footnote continued from preceding page.

In other words, each renewal of the excrements after their loss, is like a revocation of the strongly felt loss. Such a symptom may constitute the physiological antecedent of psychological "revocation" is of anal origin. Nevertheless, even accepting the idea that regression quiets the subject down in relation to his fear of genital castration, the objection can be raised that, on the contrary, it causes the sexual desires of the subject to take on a too restless aspect for his ego. If he thinks regressively about harming or killing a woman instead of desiring to achieve coitus with her, such a thought necessarily provokes too much discontent in the ego to have a quieting effect. Therefore, where the advantage of this change in libidinous organization lies is not very well understood. Thus, all that can be said is that castration fear brings about regression, but without assuming that this represents an improvement for the patient.

fear to the nose, and thus came to be obsessed with the idea of having his nose injured or twisted, just as he had previously been tormented with the thought that his penis was inclined more toward one side than the other. A twisted nose or penis symbolized having homosexual desires. Continuing these unconscious processes, this same patient later was also prohibited from touching any part of his body. And when he inadvertently did touch a part of his body, he had the impression that that particular region had increased in size. In this symptom we see clearly how the generalization and displacement were motivated by a struggle of the ego against the possibility of erection.

The patient described above did not stop in this stage, but continued generalizing and displacing even more. The prohibition against touching himself was also extended against being touched, and later against something which can only in a very far-fetched manner be called "to touch," such as the receiving of a visual perception from one side only. For example, he avoided passing by the side of a tree, because, according to his explanation, the shadow of the tree "touched" that part of his body which corresponded to the position of the tree. This caused him to believe that this part of his body had increased in size. Then, in order to "neutralize" this disagreeable occurrence, he had to give a half turn and allow the shadow of the tree "to touch" also the other symmetrical part of his body. Later he reacted in this way not only to objects but also to shadows; seeing a shadow only from one side disturbed him greatly. Continuing this process, the patient arrived at such a serious condition, that he didn't permit himself to leave his home, and in his house, he had to be seated facing symmetrical placed objects, so that he would receive unequal shadows on one side or the other. He also only dared to make symmetrical movements, or tried that they should be as nearly symmetrical as possible, according to his explanation, so that he would prevent his body from swelling up on one side by this method. If someone tried to see him, they could only speak with him by placing a table between them—which signified the avoidance of homosexual contact—and by arranging themselves face to face, in symmetrical positions, and just in the center between the sides of the table.

The obsessive fears of still another patient began with the idea that she or her sweetheart, during an embrace, had stained her dress with vaginal or seminal fluid. After that she could not put on that dress. Later, the obsessive prohibition was extended to many other dresses which "could, at some time, have been in contact with the other one in the ward-robe." This prohibition finally became so extensive that the patient would not dare to put on almost any wearing apparel at all. On her first visit to the psychoanalyst she was dressed only in a bathrobe, a piece of wearing apparel which she tolerated even though it also caused her fear.

In a fourth patient, a fear relating to doors and windows, such as obsessively thinking that a door was not closed well enough, or that the picklock was not securely applied against the wall, or that he had forgotten to open the window before retiring, proceeded from a generalization of the fear that he had left the door of his room open during an act of masturbation which had made him think that he had been seen by some member of the family at that time.

By means of generalization and displacement, obsessions, at times, reach extreme degrees of peculiarity. Thus, a patient, who could not be analyzed, whose mother was diagnosed as suffering from tuberculosis, developed a very intense obsession against tuberculosis, which made him fear contagion each time he saw some individual who appeared sickly or felt some mucus. Eventually she believed that he believed that he felt particles of saliva or mucus infected by the tubercle bacillus, in every object he came across. Continuing along these lines, she came to the point where she had to live shut up in her room close to her bed, and in darkness, so that she would not see stains which, according to her, were infected with tuberculosis. In addition, she would produce artificially a noise to neutralize the external noises which, for her, always came from the coughs of tuberculous patients. She ate only essentials in order to avoid infecting herself from the

foods or secondarily infecting her family, and if her husband went out of the house, she abstained from eating that day for fear that he might have brought some bacilli in from the street when he returned.

The process of displacement toward insignificant acts, is observed in a multitude of obsessive symptoms. That process, for example, explains the fact that the frequent symptom of preventing oneself from treading on a crack on the ground may have the value, for the unconscious of the patient, of avoiding an incestuous or a homosexual relationship, by being symbolic of contact with the maternal genitals or with the anal opening of a man. Aside from the obsessive neurosis, this phenomenon of displacement is also observed in a series of manifestations in folklore and art, as in the love for the flag, which is a reaction of profound affective feeling towards parents and country, which has been displaced toward an emblem.

The beginning of displacement to the inconsequential, is easily perceptible in the poem of Garcia Lorca, *The Death of Sanchez Mejias*, where the verse, "It was five in the afternoon," is repeated monotonously and becomes "obsessional," even though its content has very little importance in itself. What really causes the psychic emotion is the death of the bullfighter but, the ego, defending itself from it, strengthens itself in overcoming its grief, by disguising it in a displacement. Thus, an obsession is originated.

By means of displacement and generalization, accompanied by certain prohibitions, the ego of the obsessive patient attempts to minimize the conflicts which disturb it. There are subjects who succeed, at least apparently, in resolving their conflicts in a satisfactory manner, by making use of these mechanisms. But, those others, in whom these defense mechanisms have been destroyed or have given origin to an oppressive series of neurotic symptoms, run to consult the doctor.

Still another process, stemming from the struggle against the instinctive conflicts of the obsessive, is the striving to put aside affective considerations in life and attempting to be always a *rational person*, trying to have intelligence direct ones deeds rather than feelings or emotions. Toward this end, the subject chooses at least one activity of an intellectual type which he practices with a tenacity characteristic of anal characters, and which also served to overcome grievous thoughts for him.

In one patient, studying for many hours a day, was a valuable method of overcoming the preoccupations which her instinctive, amoral tendencies and neurotic fears generated in her.

But opposed to the obsessive neurotic's effort to be "rational" is the fact that, concomitantly with his anal sadistic instinctive regression, his ego effectuates a regression to a previous stage of development, in which the patient conceives of reality in a magical-animistic manner, as occurs in the child and in primitive man. This brings about a state of affairs in which the obsessive patient once more lives psychically in an animistic world, in which he is oriented and influenced by means of practices of a magical type.

This fact explains why obsessive people are frequently superstitious and why they often believe that their future health or illness depends upon a series of external events, or even on a certain orientation of their own acts which may have the significance of a good or bad omen. In addition, because they find it difficult to make decisions on a rational or other basis as a result of their instinctual ambivalence, they often react by allowing themselves to be guided in their conduct by fortuitous circumstances which orient and direct them. Their rapid obedience to these circumstances, at times, masks their internal indecision.

The magical animistic conception of the obsessive neurotic usually remains latent and is partially obscured by the previously described purely rational motivation by which the patient reinforces himself and to which all his thoughts and acts conform. But it becomes obvious in isolated acts of a more or less open magical type, which, when added to the acts which stem from the effort of the ego to subordinate itself to the dictates of reason, also gives a typically strange and contradictory aspect to the conduct of the obsessive.

The magical animistic conception also becomes obvious in fantasies with which these patients accompany their actions. In one patient, the act of arranging radiotelephonic apparatus which had the significance for him of genital and anal organs, was accompanied by fantasies of himself directing a great orchestra before a wide public in which his wife and mother were present and admired him. The mother, according to the patient, then became convinced that he was an individual of great talent and not a "blockhead" which she had frequently called him in his childhood. In another patient, the anal practice of hoarding magazine clippings which he never again read, was the magical ritual for overcoming his rivals.

The magical-animistic regression of the ego of the obsessive neurotic brings about the revival of the idea of the *omnipotence of thoughts* which is characteristic of children and of primitive man. Unconsciously, the mere thought about masturbation or the death of an individual, has the same meaning for the patient as actually having masturbated or really

having assassinated a person. This⁽¹⁾ explains the subsequent existence of strong guilt feelings of the *superego* and also of expiatory acts which are not motivated by the actual conduct of the obsessive.

The magical-animistic conception invests the ego of the obsessive neurotic with certain special characteristics. But this occurs only with a part of the ego. As has been demonstrated, the rest of the ego behaved in a completely opposite way, inasmuch as it tries to root itself in all that is logical and precise, at the same time that it strongly repulses the irrational and the superstitious. There is, therefore, a division of the personality in the obsessive neurotic, each of the party obeying very different conceptions. Yet, the integrating function of the ego attempts to reunite all the parts into a harmonious whole without every succeeding in doing so.

A neurotic individual with obsessive character traits related that, while walking along the street one day, he avoided stepping on the boundary lines between the square tiles of the pavement. Forcing himself to behave normally, he attempted from that moment on to step on the lines which he previously avoided. Thus, under the pretext of being logical, his ego came to act in a way analogous to its previous conduct, against which it wished to struggle.

In order to overcome lack of logic in itself, the part of the ego which is strengthened by being logical, is equipped with the already described defense mechanism of isolation, which it has recourse to in its battle against the instincts.

By means of acts of isolation, the ego attempts to separate the intellectual concepts from the affective colorings which muddle up rational thought. Reacting in this way, the ego behaves as it does normally, when it directs its attention to the study of a certain theme and puts aside all that which is not in a logical relationship with what concerns it.⁽²⁾

(1) "The obsessive neurotics feel obliged to overvalue the putting into effect of their unfriendly feelings in the external world, because a great part of their intrapsychic realization escapes their conscious knowledge. In truth their love—or better their hate—is superpotent; such affects justly provoke those obsessive thoughts, the origin of which the patients may not understand and against which they do not defend themselves successfully." (Freud: *Notes upon a case of obsessional neurosis*).

(2) Reik has described as *neurotic camouflage*, a certain type of behavior, most frequent in the obsessional neurotic, which consists in the regulation of the compelling necessity of expressing a particular symptom, such as a ceremonial, by submission to social life which obliges him to behave reasonably rejecting everything that has abnormal significance. Faced with such a conflict, the neurotic expresses his symptom but under some pretext that justifies it socially. Thus, one patient expressed his neurotic need for

The above mentioned logical part of the ego also seeks refuge in the pure concepts or at least in the words which represent them. In other words, it achieves a *process of intellectualization*, through which it seeks to avoid its conflicts, doubts and vacillations. The tendency to intellectualization is manifested also in reinforcements of the ego by classifying these concepts and including them in different categories. It serves the ego secondarily to defend itself from possible invasion of its territory by the repressed instinctive contents.

Intellectualization is the resultant of an activity of anal type, which strives to dominate and which gives birth to certain reaction formations of the type of order and exactitude.

Isolation together with the repulsion of the affects, is seen clearly in many obsessions such as in the patient who is capable of cold thoughts without the least sentimental content. The latter becomes manifest in psychoanalytic treatment once the patient and the psychoanalyst have succeeded in overcoming the defense of the ego.

The activity of isolation and repulsion of affects in the ego of the obsessive neurotic has deceived some psychiatrists, leading them to create theories of the genesis of obsessions with complete disregard of the affectivity of the patient.

One of the interesting characteristics in the course of the obsessional neuroses consists of the fact that the obsessive symptom, which at first

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beating with the right foot when he entered a vehicle in the city limits, by remarking to his companion that his foot had fallen asleep.

On certain occasions when a neurotic foresees that he will be faced with a conflict of the above type in certain circumstances, he will usually effect a *preliminary rehearsal* of his eventual neurotic camouflage. For example, in the case previously cited, the patient, travelling with his chauffeur, got out of the auto under the pretext of better being able to admire the landscape he was passing through, so that he could, in this way, note precisely the limits of the city and then later be able to express his ritual at the exact moment when his internal mandates required it.

This behavior cannot be described under the heading of subterfuge inasmuch as, contrary to what occurs in subterfuge, the subject wants to appear like a normal person. Nor can it be regarded as rationalization because, in that mechanism, the subject unconsciously justifies a symptom in himself while, on the contrary, in neurotic camouflage, the patient consciously conceals it.

Sometimes the cause of the symptom appears, in more or less distorted form, among the camouflaged pretexts of the patient. Thus, a girl, who camouflaged her symptom of involuntary blushing by making believe she was looking for something in her pocket-book each time she passed by a person of maternal significance such as the housekeeper in her home, was unconsciously confessing the motivation for her blush, since the act of looking into her pocketbook is a known symbol of feminine masturbation.

is an act of defense against the possible expression of an instinct, gradually becomes transformed into the opposite unit it comes to be an external expression of that self same instinct. In other words, what was originally repulsed finally succeeds in showing itself through the very agency of everything that brought about its repression. This very thing usually happens in the intellectualization of the obsessional neurotic. The repulsed affective manifestations are introduced again into the intellectual life, *sexualizing thought*.

As a result of this process of return of the repressed, words acquire a latent sexual significance and then, the struggle between the instincts and the mandates or prohibitions of the *superego*, is continued in the conscious thinking of the obsessional neurotic. The same battle as before continues but in a new terrain. From this stems the constant sophistry of certain patients and the inability to think of other patients. In this way also arises the continuous doubts and vacillations which constitute one of the characteristic symptoms of many obsessional neurotics. These are, in the last analysis, a manifestation of the intense ambivalence, bisexuality and moral conflicts of the obsessional neurotic who, as has been seen, oscillates between activity and passivity, masculinity and femininity, love and hate, and between attempting to satisfy the exigencies of the *superego* or the drives of the instinct.

The sexualization of thought carries with it also the fact that words once more acquire the magical significance which they have for primitive man and in the child when he begins to speak and comprehend what is spoken. (A demonstration of the magical value latent in words can be found in the work of Valle Inclan: *Divine Words*). This magical value is already manifest in the fact alone that frequently obsessional patients are found who have as part of their symptomatology, the use of word formulae to free themselves from their vexatious thoughts.

The influence of regression brings about the fact that the sexualization of thought and, subsequently, of language, also acquires anal characteristics. These anal characteristics are manifested not only by the presence of reaction formations, such as the observance of strict order or the excessive categorization of thoughts, but also by more direct symptoms. The thoughts come to have the significance of excrements: for example during the psychoanalytic session, the patient conducts himself in a manner analogous to his behavior in infancy during the act of defecation, while he is relating his daily happenings. Thus, he obeys or disobeys the commands of his parents in relation to this function and also

seeks the anal pleasure of retention. The anal sexualization of language can also be observed in the patient's predilection for or violent repulsion for obscene words of clearly excrementitious content.⁽¹⁾

THE SUPEREGO

The obsessional neuroses, like the hysterical neuroses and phobias, originate in infancy, as a result of conflicts provoked by the instincts. The desire to seek instinctive satisfaction and thinking about the possible reaction towards members of the family creates within the child, a series of fears which may force the ego to employ defense measures against the instincts. If these work in an abnormal manner, they lead to neurosis. The intimate relationships between the genesis of the symptoms and the existing conflicts between the individual desires and the external environment, is clearly observed in the hysteric, and even more clearly in the phobia, inasmuch as in this neurosis, the patient himself states that what he fears is something external which he considers dangerous. In the ob-

(1) Federn relates the possible presentation of a particular neuroses in a person to the development of his ego, to the energy that this ego displays, and, in addition, to the existence or lack of the capacity, on the part of the ego, to constitute a unity or, in other words, to achieve its synthesis.

In the hysterical patient the ego is weak, it is *corporal ego*. Therefore, the hysterical defense against the instincts is accomplished by means of the separation of some regions of the ego from the remainder of this psychic instance. We might say that certain limits of the ego, which are the ones which contain the psychic representation of the object, are split off by repression. For this very reason, the ego ceases to be a unity. But this ego realizes different identifications. It simulates a completely new individual and if the identification is sufficiently intense, it can give the erroneous impression of the existence of energy in the ego of the hysteric.

In the obsessional neurosis the defense against the instincts is made by means of the joint strength of the whole ego. The development of the ego occurs precociously.

The fear of the hysteric is a *corporal one*. The hysterical ego fears destruction and dreads death. The obsessional neurotic, on the other hand, feels his spiritual ego threatened; his is a fear of madness and destruction. However, such fear can also be increased in intensity so that it also may come to be a fear of death.

The hysteric is the child who, in a moment of danger, seeks the mother with his body and, when he finds her, fortifies his corporal ego by enlarging it to the size of the ego of the person who protects him. Thus, hysterics is typical of early infancy.

In the obsessional neurosis, on the other hand, the ego is independent. But it retains an infantile flavor in two respects: in the fear of the superego and in the infantile contents of magical type which fear blame and punishment. The infantile fear of castration, in the obsessive, has been converted into spiritual fear as a result of guilt feeling. The identification of the obsessional ego can be differentiated from that of the hysteric by its being a total identification, or, in other words, one of the entire ego and with the entire person whom it imitates.

sessional neurosis of the adult, the dependence of the symptoms on conflicts with the external environment appears to be more disguised by reason of the existence of an "*interiorization*" of the subject's manner of reacting. This "*interiorization*" results from the intense development which the superego attains in the obsessional neurotic, or it may be the psychic instance representing the external environment which the parents or persons of authority in childhood who dictated the subject's norms of conduct, previously represented. In a way, it corresponds to what is currently referred to as conscience.

Such a difference between the conduct of the hysteric and the obsessional neurotic can be easily observed. A hysterical person, for example, when he wants a certain satisfaction which has a latent sexual significance, continues, as in childhood, to fear the parents, the paternal substitutes or the social reaction. The conduct of the obsessive is, however, different, since he, having interiorized his conflicts, disregards, to a greater degree, the opinions and possible reactions of people in the external environment, and fears mainly his own internal superego.

The difference is even more genuine. The obsessional neurotic not only fails to fear possible harm from the external world, but also, noting his characteristic sadism, which makes him feel guilty because of the continual accusations of his internal superego, he usually fears more that he will cause harm to others.

With this observation we can begin the study of the superego which, like the ego and the id, possesses special characteristics in the obsessional neurotic. First, we must note that, as a result of regression and subsequent separation between libidinous and destructive instincts, it is a superego which is endowed with great aggressiveness. For this reason, it expresses stringently its function of censor, and inquires minutely into all the instinctive tendencies of the subject, so that it can then reproach him for what may not have a moral aspect.

Since the *superego* originates as a result of an elaboration of feelings towards the first libidinous objects, the parents, it understands better than the ego, the instinctive drives of the subject. From this fact results the existence, in the obsessional neurosis, of accusations against the ego by the superego resulting in the ego disowning certain repressed instinctive impulses.

Such reproaches are usually unconscious and operate as defense mechanisms which constantly attempt to free the ego from anything that can bring harm to it. But their presence is manifested, for example, in

depressions or in the need for severe punishment. This last phenomenon marks the existence in the subject of guilt feelings which his ego tries to expiate by imposing sufferings on itself.

The ego does not always submit to the superego. Actually, we must recognize that the reactions of the obsessional neurotic's ego toward his intolerant superego, are a continuation of its manner of reacting (real or in fantasy) toward his parents in childhood. Thus, just as a child alternates between being "good" or "bad" with a strict teacher which, therefore, awakens very ambivalent feelings in him, so the ego of the obsessive passes through phases of "goodness," in which it submits to the superego, and through others of "badness," in which it seeks satisfaction of the instincts.

The superego of the obsessional neurotic, like that of other neurotics, represents the parents. In other words, the fear of the superego is a transformation, by introjection, of the infantile fear of the parents. The self-accusations are the equivalents of what, in childhood, was fear of castration by the parents, or in the female, fear of sustaining an injury to the genital organs. As is generally recognized, the child represses his onanism centering around the oedipal objects in order to avoid the feared castration. Similarly and for the same reason, the obsessional patient represses his genital impulses and brings about a regression of the libidinous organization.

But, as we have already seen, this regression has sad consequences for the obsessional neurotic. After it occurs, the characteristic sado-masochism of the anal-sadistic organization causes the superego to be more severe in its demands and in the sufferings which it requires that the ego impose on itself and, at the same time, it causes the ego to be unable to defend itself properly from its intensified masochism.

Another source of the great cruelty of the superego, characteristic in the obsessional neurotic, is the inability of the patient to put into action, direct and frontal aggressions against the external environment. These aggressive tendencies, which the ego does not express since it submits to the superego, paradoxically, have the effect of reinforcing still more the aggressiveness of the superego toward the obedient ego. Actually, experience shows that those who strive to and succeed in satisfying their instincts do not suffer remorse whereas those who behave "well" suffer pangs of conscience. A good example of this is the fact that very religious people always have regarded themselves as great sinners in spite of their presumably moral conduct.

Regression intensifies bisexuality also and, by doing so, augments the passive-feminine impulses of the patient. The reinforced unconscious desire to have passive homosexual relations with the father, or with some paternal surrogate, translated to the regressive language of the anal-sadistic organization, becomes transformed into a desire to be beaten particularly in the region of the buttocks.

Thus, we see that the above-mentioned intensification of the desire to be beaten is connected with the work of the superego which has the function of reproaching the ego for its immoral tendencies. That desire later takes the form of a wish on the part of the ego to be beaten for possessing "bad" drives which strive for satisfaction. All of which, phrased in current terminology, signifies that the subject comes to have an unconscious desire for suffering material or psychic punishment because he believes himself "bad" or has "bad" thoughts.

Furthermore, as a result of the fact that the subject generally expects punishment, not directly from the father but indirectly from other people or external circumstances which represent the father unconsciously, there arises that form of masochism which Freud has called *moral masochism* and which Reik designates as *social masochism*. It is characteristic of the subject that he does not consciously provoke the punishment. That would be something which his ego could not admit because it would go against his conscious ideals. He accomplishes it, in better fashion, by causing his life behavior to be such that he becomes generally known as an individual of "bad luck."

The bad luck commonly results from the unconscious search for sufferings in the social sphere. Actually, one can readily observe, in the course of psychoanalyzing this type of masochistic individual, how their supposed bad luck is provoked by themselves. Similarly, one can see how their continual complaints of bad luck, signify an external expression of masochistic pleasure, just as the praises of the beauty of a loved one in a lover, are external expressions of genital pleasure.

As we go into this study more deeply, we must insist that the relationship of the ego of the obsessional neurotic to his superego is not completely analogous to that of a child who accepts completely, in masochistic fashion, the commands of his teachers. The obsessional neurotic more nearly resembles a child who, submitted to strict discipline, continually thinks of liberation and plans attempts to achieve such liberation. From which is derived the fact that the obsessive, like the child mentioned above, may repeatedly perform acts which are not tolerated

by the superego or teachers. This, finally, causes them new feelings of remorse and desired penalties, which always take the form of guilt feelings and desires for punishment in the neurotic.

But, the ego of the obsessive continually strives to be free from its submission to the superego and, many times, uses methods which, like those of the child, are not rational. One such method is that of provoking a punishment for oneself before actually achieving the desired instinctive satisfaction. For the patient this behavior means something like receiving authorization for the satisfaction since the punishment which he believes he deserves is imposed prematurely. At other times, the patient makes use of methods of deceiving himself. He may submit to something which is of little importance for him and which apparently only has the symbolic meaning of punishment. In this type of behavior, the ego brings about what has been called by Alexander "the subornation of the superego" in order to cause the latter to become more tolerant toward the coveted instinctive satisfactions.

On some occasions the ego even uses procedures of a magical type such as certain obsessional formulae which, enunciated at the moments when the patient fears the possible evil consequences of his deeds, free him from his fear and, therefore, from submission to the superego.

In order to comprehend this strange conduct of the ego we must take into account the fact that the morality of the obsessive neurotic is a pseudo-morality. It requires primarily submission, more than it does the good observance of moral laws. According to Fenichel, the ego of the obsessive does not seek punishment from the superego, and neither does that of the child subjected to severe discipline. What it actually solicits is forgiveness, however much the procedure may be cloaked in morality. In another field, an analogous situation occurs in the fact that a hypochondriacal patient visits the doctor. This act has the significance of being re-assured by the doctor, a paternal surrogate, that his deeds, related to the instincts, have not had bad consequences or, in other words, that the punishment, in the form of castration, has not been carried out.

The superego is an interiorization of the paternal requirements. Therefore, because of the very fact of their interiorization, the ego attempts, with more devices, to free itself from the exigencies of these requirements, than does the child from the demands of his actual parents and the external environment. It can have recourse to all the techniques which it also uses against its instincts, in other words, the proces-

ses of defense of the ego which we have already studied. These become effective on a double front, attempting to overcome instinctive manifestations as well as demands of the superego. All this occurs with the purpose, not to be overemphasized for the obsessive neurotic, of liberating the ego from the conflicts which are stirred up among its various psychic instances, and from those also between it and the external world.

The intense influence of the superego causes the ego of the obsessional neurotic to alternate between two distinct phases as far as its state of mind is concerned. In one of them the ego holds a positive feeling of itself together with a positive belief also in the capacity for finding instinctive satisfaction and for being agreeable to the persons of its environment. In the other phase, its mental state is depressed and the ego hurls intense accusations at itself. Genetically, the situation of the ego in these two phases is like that of the child when he still receives the praises or punishments of his parents and teachers for good or bad behavior.

These two phases, which are clearly brought out during psychoanalytic treatment strongly recall those of the cyclothymic patient, with his characteristic alternation between depression and mania. But, in addition to being less flagrant, its succession, in the obsessional neurotic, is usually much more rapid. The phases are thus more frequent.

The need for punishment of the obsessional neurotic may take different forms, of greater or lesser intensity. Superficially, its existence is already apparent simply in the general aspect of the life of the patient which is always worse than it should be and doesn't measure up to what his aptitudes, social situation, or economic means, would permit. For example, one patient spent the winter alone in a cottage which lacked protection against the intense cold of the region, in spite of the fact that he could have lived in the home of his parents. The obsessional neurotic is accustomed to rationalize this and other similar types of suffering by telling himself that it is necessary in order to strengthen the body and accustom it to withstanding adverse circumstances. Such rationalizations are always direct consequences of the patient's masochism.

For all these reasons, the effect of the superego is frequently to make the general life situation of an obsessional neurotic analogous to that of an individual who believes that he has at one time committed a crime or an evil deed and who, full of remorse and the hope of freeing himself from his guilt feelings, seeks expiation by means of suffer-

ing. As we have shown, the obsessional neurotic achieves this not only by rational means but also employs the procedures of magical type, which were cited above, in order to appease the superego which accuses him. Guilt feelings, remorse, need for punishment, and magic, all operate unconsciously, under a superficial psychic cloak by which the ego reinforces itself by being rational and by repressing affective reactions which may not be logical or justified by the actual situation of the subject.⁽¹⁾

The need for punishment reinforces even more his masochism and homosexuality which are already intensified by anal-sadistic regression. For that reason, extremely tormenting obsessions appear in the symptomatology of these patients. The patient may, for example, imagine a gigantic razor blade cutting him on the big toe of his foot. In other words, he has an obsession of a kind which clearly symbolizes castration. Or he may be tormented by other obsessions in which the patient more or less truly undergoes an anal coitus or observes a person being beaten on the buttocks. We must emphasize that the person being punished or submitting to anal coitus always represents the patient himself even when this is camouflaged by a process of projection.

The symptoms of the obsessional neurosis, like those of hysteria, can signify instinctive satisfaction or, by contrast, punishment which the ego imposes upon itself in accordance with the requirements of the superego. Experience shows that in the symptomatology of hysteria, there is usually a condensation of both symbolized in the same symptom but generally derived predominately from instinctive satisfaction.

(1) In an attempt to classify individuals psychologically, Freud has described three libidinous types which he calls the erotic, the narcissistic, and the obsessive.

Of these, the obsessive type is characterized "by the prevalence of the *superego*, which separates itself distinctly from the *ego*. He is dominated by fear of the conscience just as the erotic is dominated by the fear of loss of love. He has a deeper connection with his psychic interior than with the environmental exterior and is, therefore, independent to a great extent. From this point of view he is usually the pillar of culture and is preferably conservative."

Through combinations with the other two libidinous types are originated the erotic-obsessive and obsessive-narcissistic types. In the *erotic-obsessive* "the *superego* curbs the expressions of the instinctual life. It depends to a great degree on actual human objects and simultaneously is influenced by the psychic imprints left by parents, teachers, and others who served as models for him in childhood." The *obsessive-narcissistic type* gives the most favorable variation from the cultural point of view, because its capacity for potent education based upon the firmness of the ego toward the superego, is added to its independence from the environment and its submission to the demands of conscience.

On the other hand, in the obsessional neurosis, instinctive satisfaction and punishment by the superego usually give rise to distinct symptoms without any condensation. Also, contrary from what occurs in hysteria, the symptoms of primitive significance predominate mostly at the beginning.⁽¹⁾

(1) Melanie Klein has introduced some modifications in the psychoanalytic conception of the obsessive neurosis. Most important in her modifications is that she affirms that obsessive symptoms are presented already in the *early phase of the maximum development of sadism*, which, according to her, covers the period from the second half of the first year to the third year.

Her observations stem from the psychoanalysis of children by means of her play technique. She deduces that in that early sadistic phase, centering around masturbation, the child has numerous fantasies in which he carries to the extreme, aggressive attacks against the breast or belly of the mother, with the purpose of possessing it for himself or injuring its imagined content of children, excrements or the paternal penis.

These cruel fantasies give rise to the fear of punishment by the parents or even by other objects which represent them or substitute for them. The child then dreams about external objects that try to harm him just as he attempted to the maternal belly or breast. From all of which results the fact that, for him, certain external objects are converted into sources of danger, into "bad" objects, according to the terminology of M. Klein. Also, the elaboration of the instinct of self-destruction, brought about by means of projection on an external object, increases the supposed dangerousness of some external objects.

This psychological situation is complicated even more by the introjection of such "bad" external objects, thus giving birth, within the ego, to internal images tinged with sadism directed against the subject himself. They constitute preliminary conditions of what will later be the superego.

All of these "bad" external and internal objects awaken an intense anxiety in the infantile ego, precisely because of its great aggressive capacity. However, when further development increases the libidinous tendencies as opposed to the destructive ones, the psychological situation described above, is passed over. This occurs when the sexual organization reaches the second anal-sadistic stage in which the subject still attempts the retention of the object. (The primary anal-sadistic stage, on the other hand, attempts the elimination of the object. In it is found the point of libidinous fixation of paranoia. In this stage the excrements are regarded as poisonous products endowed with great power of magical type).

The passage from the first anal stage to the second represents the transition from the psychotic processes to the neurotic. Between these is found the obsessive neurotic, which according to M. Klein, constitutes an attempt to overcome the psychotic fear of the previous phases. Such psychological meaning explains the existence of obsessive traits in early infancy. They do not yet constitute a classical obsessive neurosis but this is because the child does not achieve its synthesis. This synthesis is achieved at a later date at the beginning of the latency period of sexuality. Only then can the typical obsessive neurosis seen clinically be initiated.

In summary, the obsessive symptoms originate because in the secondary anal-sadistic stage, the libido attempts to conserve the object, when it tries to diminish its sadism, for example, by struggling against the destructive power which the excrements presumably have according to the infantile mind. This is what carries with it the result that reaction

formations of nausea and cleanliness are developed directed against the dangerous excrements.

Compassion is also developed in which the positive desire toward the object is clearly observed. The same thing happens in other obsessive traits as, for example, the symptom in pairs, which is a precise example of a tendency to reparation of injuries against the objects, committed in previous stages of individual evaluation. All this has as its purpose the attainment of the tranquility of the subject, since the conservation of the external or internal object or even its repair when it is thought to have been injured, symbolizes that the body itself cannot receive external or internal attacks and that the possibility of its destruction is thus avoided. Also, the subject thus imagines the existence of "good" objects, which result from his good conduct, aiding him in his vital struggle.

The obsession to give is a reaction against previous tendencies to rob and to destroy. Similarly the obsession to count is a way of assuring oneself of the preservation of the object and of having repaired it properly after having destroyed it in fantasy. The obsession to know illustrates an intimate connection with the primitive sadism directed against the belly of the mother. In another evolutionary stage its significance changes since knowledge is utilized by the subject as a way of overcoming his psychotic anxiety, affirming to himself that external reality is not as sadistic as has been fantasied.

In spite of its great interest and of the fact that it refers to all aspects of the obsessional neurosis, there is a psychological fact which the theory of M. Klein does not appear to explain sufficiently. It is the presence of clearly genital guilt feelings which obsessive symptoms present. Many times it is usually the first thing which appears when one is listening to a patient. If it is a woman, for example, she states that she finds herself unable to wear any of her clothes, because one of her dresses was once stained with a genital secretion, or, in the case of a man, he might affirm that he is unable to touch himself in any region of his body, and, in the course of psychoanalysis, it is discovered that his behavior is the result of the fact that the act of touching himself is associated with touching his penis and later with the prohibition against masturbation. We might mention that in the obsessional neurotics the above-mentioned genital guilt feeling, appears to be the primordial point of the cleavage of the symptoms. It does not occur in pregenital sexuality in which the obsessive symptoms are shown. For this reason, the obsessive neuroses, in psychoanalysis, always give the impression of a struggle against the instincts which is expressed in a field different from the one in which it really originated. If we discard this unappreciated fact, the theory of M. Klein explains, in all its importance, the occurrence of the points of fixation and of the different pregenital elaborations which so profoundly confirm the obsessional symptoms.

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THE PSYCHOANALYTIC APPROACH

TO THE

PROBLEMS OF OCCULTISM*

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No field offers a richer harvest for psychoanalytic investigation than the so-called occult. So far it has been singularly neglected, not so much for lack of willingness on the part of psychoanalysts but rather for lack of opportunities.

Practitioners of the mediumistic art may submit to an investigation of their *phenomena*, but do not like to subject *themselves* to a psychological exploration. It is usually after a shock, accident or serious illness that people of certain "psychic" disposition discover themselves to be in the possession of what they call mediumistic gifts. However, such an admission is not made willingly because it strips the glamor from the profession, and the prospect of being healed is not so enticing when it might involve the loss of a livelihood. Physicists are preferred as investigators because they concentrate on the phenomena and on the establishment of a laboratory technique for assuring foolproof control of recurrent manifestations. Physicists have little interest in the psychology of the medium. It does not matter to them what the phenomena mean to the medium, and instead of trying to cure them from their condition they want to preserve the manifestations from whatever morbid source they may spring. The fraudulent or genuine character of the mediumistic performance is the only concern of that special branch of inquiry which is called Psychical Research. This organized and systematic inquiry into mediumistic phenomena was born in 1882 with the foundation of the Society for Psychical Research in England. In face of the opposition of established science, it suffered from the same anxiety of trying to be too scientific which characterized the beginnings of psychoanalysis. It judged mediumistic phenomena by standards of evidence.

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They were either genuine or fraudulent. The investigators have completely failed to realize that the measuring rod was artificial as far as unconscious manifestations are concerned. When things do not happen according to expectations, as they seldom do, the scientists get nervous. Being always apprehensive of the danger to their reputation, they withdraw from the investigation at the first breath of a scandal. Sooner or later, there is a scandal in every psychic investigation. As a result, psychical research is now more or less shunned by science and is mostly conducted by men with insufficient training.

From this cul-de-sac, psychical research cannot hope to escape until it will include a genuine psychological investigation. Psychologists cannot be compromised by mediums because they are just as much interested in the mental processes which are active behind fraudulent phenomena as in those behind the genuine ones. Studying the whole of the medium's personality, they are not bound to partial commitment on some of the phenomena as, for instance, a physicist would be who might observe primarily the phenomena of energy discharge and the like. Psychologists will no more reject a medium for conscious or unconscious imposture than they would reject an analytic patient for lying. A medium may cheat for similar reasons that drive a kleptomaniac to stealing. He may produce valuable psychological phenomena as a neurotic produces his symptoms. Viewed as a conversion neurosis, mediumship may offer a novel and attractive field of inquiry. One can even venture to say that the mediumistic activity may represent a form of self-therapy, that it permits the affected persons an adjustment to life by sublimating individual traumata along channels of social usefulness, and by strengthening the importance of their own ego.

Psychical researchers admit that all mediumistic phenomena arise from, or manifest themselves through, the unconscious mind of the medium. However, they do not quite realize that the unconscious mind is not interested in science, in standards of evidence, in genuine or fraudulent manifestations, but only in its own dynamic problems. It should have dawned on psychical researchers long ago that when the messages of a medium in trance have no meaning for the "sitter" (the man who engages the medium), to the expert psychologist they might be profoundly revelatory of the medium's own psychic life. Nobody has yet made the attempt to investigate mediumistic phenomena from this angle. The average psychical researcher either hopes to discover new laws for science or is seduced by the secret hope that he may find evidence of a life after death and of an interaction of a discarnate intelli-

gence with that of the medium. A psychoanalyst will be more interested in the medium's own spirit, which has a better chance of manifesting itself than a hypothetical disembodied entity.*

But let us start from the beginning, and settle first the meaning of the term "Poltergeist". In literal translation from German, it means noisy or racking ghost. It purports to be the agency behind such mysterious happenings as stone throwing, from no visible source, the smashing of crockery and other breakables as if by invisible hands, the mysterious disappearance and reappearance of portable objects, and the malicious persecution of a young boy or girl of a pubertal age. Because of the latter feature, Poltergeist phenomena are often ascribed to the sideslipping of tempestuous sexual energies at the time when they first ripen in the human body. However, no one has been able to explain how these biological forces can be projected outside the periphery of the human body for mechanical action, nor is it true that the Poltergeist only functions at pubertal times. Children and mature persons have also been known to be the apparent foci of these mysterious happenings. A Census, under the title *Historic Poltergeists*, published by the International Institute for Psychical Research in 1935, puts on record 300 cases from 530 A. D. to the present.

If such phenomena were recorded in every age, why is it that the very term Poltergeist is unfamiliar to science? The answer is that science has always been wary of the human element in experimentation. A first-year astronomer may be able to figure out the orbit of a planet, but who could figure out the orbit of a fly? Poltergeist disturbances are more erratic than the flight of flies. They do not happen under direct gaze, but always at the moment when attention is diverted. This fact alone is sufficient to create prejudice in the eyes of a physicist, but not so in the eyes of a psychologist. If the Poltergeist outbreak is due to a landslide in the unconscious mind, it is easy to understand why direct

* For these reasons, I consider psychical research the legitimate preserve of psychologists, particularly of psychoanalysts. Any single case may prove the value of psychoanalytic vision in the understanding of psychic manifestations. Never was the point proved better than in the case of the Thornton Heath "Poltergeist" which I investigated in 1938 for four months in my capacity as Director of Research of the International Institute for Psychical Research of London. This was the case to which I owe my personal contact with Freud. He did me the great honor of reading the manuscript of the completed investigation and commended it, saying that he felt richly rewarded for reading it. This was a supreme satisfaction to me, and it was an epilogue to the storm that broke over my head when the news spread that I had found a sexual neurosis at the bottom of the Poltergeist outbreak, a conclusion so indecent that it hardly could have failed to bring about the parting of the ways between myself and the Institute.

gaze interferes with the manifestations. The avoidance of observation is part of the repression mechanism. The activity of the Poltergeist is nothing to boast about. It is anti-social, it vents violent hatred, it causes destruction and pain, and it inflicts self-castigation. Only by a failure of repression can such attitudes see the light of the day. Concentration on the part of the observers and self-consciousness on the part of the Poltergeist subject results in increased self-control and the failure of repression becomes less evident. The inhibiting influence is similar to that of consciousness trying to watch the oncoming of sleep. The more intense the watch, the more delayed will be the sleep. To be concurrently conscious of something unconscious is a contradiction in terms. It must either be one or the other. Concentration and self-awareness clamps on the lid; diversion of attention permits it to lift explosively.

As, however, each explosion converts some of the unconscious pressure into mechanical activity, the disturbances begin to wane almost as soon as they start. As a rule, the stay of the Poltergeist is limited to a few days, sometimes a few weeks, rarely a few months. But the activity might be kept going by artifice because of the boost which notoriety gives to the ego feelings of a repressed or inferior person, and for many other reasons. It is also important to remember that the outbreak establishes a pattern for unconscious activity and the symbolic meaning of the Poltergeist act is in no way affected if subsequently it is performed by unconscious muscular activity in place of the supernormal one. In fact, this is the very thing we should expect. Yet, when it happens, it is treated as a discovery, the Poltergeist subject is branded as a fraud and the investigation closes abortively.

As a rule, when the scientists arrive on the scene, the heydays of the Poltergeist are over. That is why they never witness as startling occurrences as are reported at the beginning. The pressure in the unconscious mind of the haunted person is no longer sufficient to produce a violent explosion, but perhaps sufficient to keep calling attention to grievances and injuries by muscular automatism. Without discovering the sign language of the Poltergeist, we can never understand it. The Poltergeist is not a ghost. It is a bundle of projected repressions. No psychoanalyst could dream of a more glorious opportunity for the study of psychic mechanisms than that offered by the bedlam in a poltergeist-haunted house.

And bedlam it was at Thorton Heath in mid-February, 1938, in the one-family house of Mr. and Mrs. Forbes. GHOST WRECKS HOME,

FAMILY TERRORIZED — shrieked a headline in the London Sunday Pictorial. The article spoke of "the most amazing day" in the life of two journalists, of wine glasses and saucers exploding under the impact of an invisible hammer, of eggs, saucepans, fenders, rugs, coal and a score of other objects sailing through the air and sometimes through closed doors, propelled by no human force. The Daily Mirror followed the story by sending five reporters to the haunted house. Two were left unconvinced that a spook was abroad, three were bewildered, but all were satisfied on one point, that whatever the force, it centered around frail, invalid Mrs. Forbes. I sent my assistant, a brilliant young inventor to check up on the story. He came back reporting that Mrs. Forbes' reactions were of absolute terror, that her pulse rate went up to 120 and her whole body was shaking violently at each explosion. In 72 hours since the disturbances began, 36 tumblers, 24 wine glasses, 15 egg cups, 5 tea cups, 4 saucers, 1 salad bowl, 3 electric bulbs, 9 eggs, 2 plates, 1 pudding basin, 2 vases, 1 water jug, 1 pot of face cream and 1 milk jug were smashed by the Poltergeist. He saw glasses fly up and explode in the air, and out of five incidents observed, he considered four unquestionably supernatural.

With this report, a *prima facie* case for investigation seemed to be established. I repaired to the haunted house myself. While my own experiences were less impressive than my assistant's, I saw enough to conclude that Mrs. Forbes was the victim of a serious mental dissociation. That the psychic outbreak originated in grave unconscious conflicts appeared indicated by two stories from her previous life.

Eight years before, during a game of cards at her home, she fell into an unnatural state of sleep. While her husband was trying to shake her back to consciousness, she dreamed that her dead father was pulling her in the opposite direction. Then her father leaned over and drew a cross on her left breast with his finger. When she woke up, blood was oozing from that breast and the mark of a cross was faintly discernible. She went to St. Thomas Hospital for an examination. Under the cross, a columnar celled carcinoma was found. It was removed by operation. I checked up on the dream through her husband, and on the medical part of the story in the hospital. I have a signed report of the operation but after the lapse of eight years the surgeon could not remember the cross.

I was also told that she had married her husband at 17 against her father's will, but that the father forgave her and her marital life was happy and contented. I had good reason to doubt this on finding out that nine years before she had an attack of hysteric blindness which lasted

for six weeks, and that three years earlier, following an anthrax poisoning in the mouth, she tried to stab her husband in the back with a carving knife and then ran into the street in her nightgown, screaming: murder, fire!

All this indicated repressed aggression against her husband. However, I was on the job as a psychical researcher to investigate objective and not subjective phenomena. I wished to test, before all, whether the Poltergeist would follow Mrs. Forbes to the Institute and produce phenomena there. The ordinary ghost is said to haunt a house, the Poltergeist to haunt a person, which in itself is a phenomenon worth investigating. I found that Mrs. Forbes was followed by the Poltergeist, whereupon a series of experimental sittings, replete with excitement and adventure, were initiated.

It is impossible in this paper to give more than a very short summary of these sessions. They pleased Mrs. Forbes very much. She was vivacious, beautiful and intelligent. After an arid life in Suburbia, she found herself the center of attention in the midst of people who were far above her social scale and who considered her a mystery woman. She played the role well. She loved to live dangerously, and showmanship was in her blood. As it gradually emerged, she was trained for the tight-rope in early youth until she had a bad fall; her uncle used to be an exhibitor at an amusement center and her mother was the lady sawn in half. When her family tried to stop her from continuing the experiments at the Institute, the Poltergeist turned against them with such destructive fury that they had to give in, whereupon the trouble immediately ceased.

Here was an excellent pointer to frustration as the cause of the original outbreak. Proof of it emerged on analyzing the first acts of the Poltergeist. Mrs. Forbes had an abscessed kidney which was drained seven times. The last time, her husband happened to be also sick in bed. The pandemonium began after three days of joint confinement. Glasses smashed on her husband's side of the bed, the eiderdown flew up into his face and he was chilled by an icy blast which seemed to emanate from his wife's left side. He felt as if he had been in bed with a corpse, and had a recurrence of his old nightmare in which his throat was being cut. The experiments at the Institute relieved this situation. They gave a socialized outlet to Mrs. Forbes' antagonism and diverted it from the husband who was totally unaware of his dangerous situation. I have failed to realize how near this hostility was to a homicidal mania until she confessed that her favorite cat lost one of its back toes; it was cleanly sliced off as if by a knife, and she had the awful feeling that she might have

done it herself. Even though, in final analysis, she remained uncured, enough has been done for her to eliminate this peril.

In the experiments at the Institute, Mrs. Forbes turned out to be an apport specialist. Apport comes from the French "apporter." It is a spiritualistic term for the mysterious arrival of an object of known or unknown origin, either falling from the air with a clatter, and usually hot on touch, or found in the hand or on the body of the medium at a time when it was not expected to be there.

At her home, some of these objects were big and heavy. Once two elephant teeth clattered down from the air. They were cut in half and polished, apparently pieces from a collection. At another time, a big silver necklace made of hand-wrought chains and old Turkish silver coins "landed" on her neck as she was descending from the bathroom and burnt it severely where its weight pressed into her flesh. The spiritualist would say that the heat of the apported objects was due to a disintegration process accomplished by discarnate operators who specialize in bringing apports. The psychologist has a far more simple theory to offer. He is of the opinion that the heat imparted by the human body on which the object is hidden causes the rise in temperature. In this case, Mrs. Forbes was heard to scream, but nobody saw the actual arrival of the necklace and when seen it was cold to the touch. Moreover, her flimsy dress was unscorched. If the heat was intense enough to cause first degree burns, the fabric which has no natural moisture content should have been affected. As she came from the bathroom, I thought that the curling iron was more likely responsible for the burns than the necklace. I knew of her tendency to self-mutilation, also of her suicidal compulsion. Her reckless expenditure of vital energy in a state of impaired health was, perhaps, also part of the suicide complex.

At the Institute, the shower of apports included some curious archaeological objects: pieces of pottery from Carthage, with labels on them in neat masculine hand, a Roman lamp, a Roman tear vase, an African fetish, a prehistoric flint axe, fossils, semi-precious stones, quartz crystals, crosses, locketts, rings, coins, medals, charms and all sorts of odds and ends. At the moment of the objects' arrival, she almost invariably showed shock affects and occasionally her distress was communicated to some of the experimenters who fell sick and, relying on their sensations, secretly signalled to me that the apport was about to come. The sessions took place in daylight in a room built on the proportions of a cathedral, and she was either sitting or walking around with people who held her by the arm. In the final phase of the experimentation, she was

dressed in a one-piece garment with mittens sewn on. Yet, inside these mittens, outside in her palm or falling in her proximity, the apports came with a bewildering regularity. Before the session, she was undressed to the nude in the presence of a committee of ladies who were expert searchers. They gave her fresh undergarments and never let her out of sight. However, anything was likely to happen during her stay. Tea cups flew out of her hand, saucers split in mid-air, white mice crawled around the place, a bird flew up with a shrill cry from a point near the bottom of her skirt, heavy chairs turned over an appreciable time after she passed them and claw marks appeared on her arms and back which she attributed to a spirit tiger. Some of the ladies felt the fetid smell of the zoo. On other occasions the room was filled with clouds of violet perfume and one could walk in and out of them.

Amidst all these mysteries evidence was slowly accumulating that Mrs. Forbes was suffering from a serious state of dissociation and that consciously and unconsciously, with a diabolic ingenuity, she exploited every opportunity for fraud. The conditions of control were gradually pushed to the point where nothing but a genital examination remained wanting. For reasons of delicacy, all my lady associates fought against this test. They argued that the size, shape and number of apports militated against genital concealment. They were afraid it would be the last straw to break the camel's back. It was, but not the way they imagined it. I arranged for a portable X-ray outfit and had it secretly set up next to the seance room. Then, after Mrs. Forbes was dressed in, I suggested a picture. She protested but submitted under pressure. The X-ray plate was immediately developed and showed three objects suspended on her belt next to her skin, ready for apportionation. The seance was still going. It was now easy to see how, with hands folded across her breasts, she massaged them to the neck opening or pushed them down the arm into the mittens. Here was evidence at last that the medium was a better expert in concealing than my searchers in finding. I also knew now how the apports arrived but the genital concealment still had to be proven.

She was left under the impression that the X-ray men had bungled their job; for the next session she was dressed in tights under the one-piece robe. The size was small and it cut into her genitalia. For the first time, no apports came and she felt distressed and uncomfortable. She had to be if the objects were within her body and she had to walk with them up and down. The session broke up in a complete failure. In the library, a new phenomenon appeared. Her abdomen began to swell until, to all appearance, she looked pregnant. It was the first dem-

onstration of aerophagia, unconscious air-swallowing, a perfect answer to the need of the moment. Her garments had to be undone, so that she could relieve the pressure by massaging her abdomen. This gave her a chance to retrieve her apports for a belated arrival. But luck was with us. As she was dressing for departure, a square piece of linen fell to the floor from under her skirt. One of the ladies pounced on it and called me instantly. The linen was thick and it showed stains by genital secretions, a suspicion which chemical analysis confirmed. The apports were wrapped in this linen, hidden internally and must have been ejected into her hand and hidden within the garment as she was being dressed. She needed the skill of a magician for the feat, but she had it. As a matter of fact, two of the greatest living magicians who attended some of our sessions, were completely baffled by her performance.

The evidence, by the standards of psychical research, was damning and it invalidated all previous observations that were in her favor. Scientifically, the case was dead. Psychologically, it was beginning. Psychical research strictly as a physical inquiry is like a snake biting its own tail; it recoils on itself. By expecting erratic and uncontrollable phenomena to occur at a stated time, it frustrates its end from the very beginning. It fosters narcissism of the mediums to a point where they feel they must satisfy the demand for phenomena even at the greatest risk to themselves. The exposure left no plea for unconscious motives in the origin and continuation of the phenomena; it ignored Mrs. Forbes' increasing dissociation and the shock of discontinued experiments. Occasional alterations of personality were suggested by acts of ambulatory automatism. She lost time, wandered back and forth, without knowing where she was. She built them up into astral projection fantasies. Two altered personalities also manifested in her light trances; both were crude and immature but revealing a dangerous instability of her mind. The exposure contributed nothing to the case that has not been suspected and it almost ruined every chance of getting at the bottom of the original mystery.

Two days after the loss of the linen wrapper and before the X-ray findings were communicated to her, I spoke to her on the telephone. Her voice was barely audible. She was afraid of going insane. Her belly swelled up four times the day before and she was unable to keep her balance in walking. During the night she had a horrible experience which she dared not even mention to her husband. Being pressed for information, she reminded me of her nightmare of three weeks before in

which something hit the back of her neck and in the morning she found some tiny red marks at the spot.

I looked into my notes and found a record of her story dated April 22nd. I even looked at her neck, but not too closely. Thinking that she had an erotic dream, I dismissed the story. It appeared now that she had been incubating a stupendous fantasy. The dream of three weeks before was the prelude to a vampire visitation. No act of self-mutilation or suicidal compulsion could equal it in horror. Two livid punctures at the back of her neck, a sensation of being drained of blood and a ghostlike paleness in the morning furnished the objective background. I called a doctor and took him with me to Thornton Heath unannounced. We found the punctures: two deep, irregular marks behind the sternal mastoid muscle. Judging by the state of scarring, they might have been caused during the time reported by Mrs. Forbes. I subjected her to a severe cross examination, and this was her story and her answers to our questions:

"Last night (May 18th, 1938) about 10:15 p. m. I went up to the bedroom before my husband. As I reached the righthand side of the bed I heard the fluttering of a bird. The air was disturbed, it vibrated. Then I heard no more. I did not light the lamp and did not draw the curtain. I thought the thing may come again and I would see what it was.

"Then my husband came up and asked me why I did not draw the curtain. There is a lamp on the opposite side of the street, which gave enough light for him to undress. He went to bed without switching on the electric light. I could not keep awake. Something put me out as if I had been chloroformed. I fell into a heavy, unnatural sleep.

"It may have been around midnight that I woke with the sensation that there was something ghastly on my lefthand side (which is away from my husband) on top of the cover. It felt like a human body. Pressing against my neck was something cold and hard, about the size of a man's head. I could not move, I could not shout, I was frozen with fear. I felt getting weaker and weaker, sinking. I imagine that bleeding to death would give the same sensation. I felt like that when I lost a lot of blood after an operation."

How long did this sensation persist?

"Not long. I became conscious of the thing pressing into my neck as I started feeling weak. It gave me no pain, but I felt pins and needles all along my neck. The thing itself was quite still."

Did you feel lips or teeth?

"It is hard to tell. I had the impression of something biting. The idea came to my mind that whatever was pressing on my muscles was trying to paralyze me, but I was too frightened to think. The body itself was a dead weight. It felt cold and nasty. There was a smell; the smell of rotten meat, the same smell which came after the violet apport on my wedding anniversary."

Was there blood on the pillow in the morning?

"I did not look. I almost yelled when I woke up. My neck felt sore. I put my hand up and felt two little lumps. The thought crossed my mind that I must have scratched myself. But I don't think I could scratch myself like that."

How did the thing leave you?

"Quite suddenly — immediately after I was able to move. Directly it left me, I heard the same flapping noise, a sudden swish through the air with a regular beat. It went towards the window, yet I saw no shadow crossing it. The top of the window was open. The light in the street was still on. I felt too weak to get up and I dared not wake up my husband. He had been complaining of feeling terribly weak in the mornings. I did not want to upset his night rest. He told me the night before that there was a bird in the room. He heard it settle on the chair beside my bed.

Why do you associate the experience with loss of blood?

"I felt very cold in the morning. My hands were dead white and bloodless, my face awful. My next door neighbor said: you look like a ghost, there is no blood in you. My operation and the stories of my husband how he nearly bled to death in France are further reasons to associate the experience with loss of blood. There might be something else tucked away in my mind that I cannot bring forward. For the life of me I cannot think of it now."

Do you think it might be something you had read or had been told?

"No, my impression is something ghastlier."

Is this impression due to the smell?

"No. It is the presence of something. It makes me shudder. I want to pull away and cannot. Did you ever try to run away from something in a dream and could not? It is the same sensation."

Was the smell there all the time?

"Yes. Only once did I smell something similar. I was a child. Mr. Anderson a neighbor, died. He had a growth in his head which burst. His widow could not bear going back into the room where he was laid

out and asked my mother to do so. So I hung on to her skirt and got as far as the door. The smell wafted out. It was horrible."

Was the experience of three weeks ago quite similar?

"No. I had the power to shake it off. The marks on my neck were not sore and there was no bump underneath. I had the sensation of loss of blood, but not the sensation of sinking."

Have you ever had any other experiences or dreams that may have any connection with this happening?

"Sometimes I feel that I am not here, that I am not really alive. I feel as if I had died on the operating table. It seems to me as if another person had taken possession of my body. I am often told things which I am supposed to know but I don't. I used to tell my husband after my last kidney operation that I am not really here, I am dead, you don't know it, you cannot really hear me. I used to touch him and my son. They would not feel me or hear me. When I walk I often feel above the ground and floating along. I often dream that I am in a hall of coffins. It is a big, stony place, steps lead down to lots of coffins. I stand and watch and see myself rising from one of the coffins. Before I leave everything goes misty. I try to wake up and get back to my body, but I cannot. I had this dream six times."

The latter confession reminds one of incipient schizophrenia. The vampire visitation sounded like a page from Bram Stoker's *Dracula* but it was impossible to shake off the impression that the experience was real to her. The loss of blood was imaginary. A checkup at St. Thomas Hospital proved it. Therefore, the punctures on her neck were not caused by bloodsucking. On waking up she thought she must have scratched herself. No doubt she did. She punctured her neck in an act of self-mutilation, and the vampire fantasy must have been suggested by her husband's mention of a bird in the room.

On June 24th, she had another vampire experience, and then she recalled an odd connecting factor; her menstruation coincided with the visit of the vampire. Transposition from below to above is indicated and the query arises: was the vampire visitation a superstructure to hide a story of assault?

The vampire appeared after the genital exposure by the linen wrapper. Just before it returned again, she suffered another humiliation and defeat. Again there were two puncture marks, diagonally across the first two, again she heard the flutter of bird's wings and had a sinking sensation. Did she enact the role of a victim a second time to re-echo a forgotten traumatic experience?

The smell, through the memory of Mr. Anderson's brain tumor, appeared to be an olfactory association with death. There was a Violet, a friend who had died of cancer in the throat. Her flesh wasted away until she weighed 28 pounds. The last day Mrs. Forbes went to visit her, the wedding ring fell off her emaciated finger. On the day of Mrs. Forbes' wedding anniversary, some time after the Poltergeist outbreak, violets fell on her husband from above as she woke him in the afternoon. Soon afterwards, the odor of the flower was followed by a smell of decomposition. Violets were Mrs. Forbes' favorite flowers. When she married, her wedding bouquet was violets. Was her unconscious mind associating violets with violation in intercourse and death by assault? I observed once in her house that the mysterious perfume of violets formed an invisible curtain to hold off the stench emanating from the open bathroom above. I wondered then if the perfume should not be taken as a symptom of the need of psychic deodorization! She was certainly "violated" when the claw marks, attributed to a ghost tiger, appeared on her arms and back. But she had an urticarious skin, and I was convinced that she had caused the marks herself. However, was she aware of what she was doing when it began? The fetid smell by which the presence of the tiger was betrayed, established an odd relationship between this manifestation and the stench which followed the odor of violets. She had plenty of operations throughout her married life, but was that enough to account for her recurrent coffin dreams and for the feeling that she had died? Dimly she was aware that behind her sensation of loss of blood something awful that made her shudder was hidden. From the age of 5 she was strangely drawn to churchyards and graves.

"I am always looking for a strange grave," she said. "There is something I want to find, the grave where someone is buried, but I can never find it. I can never find the right name. It is a man's name. I am sure I shall find it one day and then I will be satisfied. I don't remember ever having taken an interest in gravestones with a woman's name on it. I always like to take pieces of odd gravestones with me and keep them. I never tell my husband when I go to graveyards, I don't know why."

There was reason to think that she was looking for the grave of a man who had done her an unforgiveable injury before the age of five, that she wanted to see him buried! That elements of a birth fantasy were fused with her vindictive emotions, was revealed by three recurrent birth dreams. In one she went into a room in which there was a huge stove. The door shut behind her and the only way to get to mother

was to crawl through a tiny, archlike opening in the stove. She was always frightened of the prospect of wriggling through. In the second dream she was in the street, with thousands and thousands of people behind her. She could not get back that way. In front of her was a big, beautiful archway but it was becoming lower and lower as she was nearing it. Finally, it became a small opening and she had to squeeze through with a terrible effort. In the third dream she went into a cave by scraping away the sand which barred the entrance. Neither her husband, nor her son was allowed to enter with her. She found a piece of parchment in the cave, written in a foreign tongue. Every time she went into the cave, the parchment became more brittle and harder to unroll. Every time she said: I must find someone who can understand this, it means a lot to me. In the cave, there was a horrible smell of fungus. She smelt it even after waking up.

In this fantasy of return into the womb to find out the meaning of life, the genital character of the horrible smell is plainly revealed. When she associated this smell with apports, when she concealed sharp and jagged objects in her vagina, she may have been reenacting, by repetition compulsion, the double traumata of birth and rape. Perhaps this was the reason why there had to be two puncture marks, an otherwise inessential feature of a vampire story!

"Birth and death mean the same thing to me", said Mrs. Forbes. "I seem to remember that in some place where I have gone to sleep I smelt the fungus first. It suggests to me everything nasty, damp and buried."

The very choice of apports might have been a cipher to her tragic life story. The elephant teeth might have spoken of the hugeness of the man who assaulted her, in proportion to herself, the tiger claw could have hinted at his savagery, the pottery at breakage and the ruguous surface of a tropical nutshell at the bruising of her flesh and at the scaly feeling which appeared in a recurrent erotic nightmare about a little man in alligator skin. Twice she was visited by an incubus, a ghost who came to make love to her. The main difference between the vampire and the incubus was the point of penetration and the replacement of desire with terror. One of her apports was a beautiful organ-pipe coral. She did not know it by name but on hearing it she revealed that organ music has a very distressing effect on her. It gives her a choky sensation and she cannot help bursting into tears. She had no idea that organ may stand for sex organ but the church entered into her free associations

with the word rape when, in a string of a hundred words, it was presented to her. She said:

"Horror, doubt, death, trees, darkness, damp, horrible face, a pair of eyeglasses (I don't know anybody who wears such things), something very cold, a slithering movement, something with scales on, flesh is hard, a church, a terrific lot of people."

Tears came into her eyes and she continued:

"The word 'rape' always makes me shudder. When I read in the papers about rape, I feel murderous and cry out: the wretch! I often wonder the extent of the injury which children suffer and whether their mothers tell them when they grow up. All my life I have been afraid of men with big, round glasses. They make me shiver."

Now I recalled that on March 22nd, Mrs. Forbes arrived at the Institute considerably upset. She said she was attacked in the train by a man who wore big, round glasses. Later she confessed that she was both fascinated and upset by two experimenters who wore big, round glasses. Not a word about my suspicion of rape was breathed to Mrs. Forbes before this association test. She had brought up the subject herself before in a state of semi-trance. It appeared that near a church, at a picnic on a Sunday, she had a frightening vision of a man with what she called an evil face and colored rays of the sun surrounding his head. She spoke of this experience when she came to her session and her trance personality spontaneously returned to the subject, stating that the man was a clergyman who, a hundred years ago, was hanged for interfering with small children, and that Mrs. Forbes was probably sitting on the spot where one of the outrages took place.

This was a very strange statement. Since her marriage, she could never sit with her husband under trees. She used to jump up and pull him away into the open. She mentioned trees in her rape associations, and presently, and very dramatically, she added something about strangulation in the form of a stigmatic phenomenon.

On returning to normal consciousness from her light trance, her voice was gone, she could not even whisper. Gradually, the vocal chords resumed their function and she remembered that she had sensed somebody very big and hard; her own flesh felt hard and she had a tightening feeling around her throat as if she were being pulled up. After a pause she continued: "I have that tightening feeling in my throat now. I am being pulled up."

Before my own eyes and three fellow observers, in full daylight, strangulation marks appeared on her throat, two half circles, overlap-

ping, a quarter of an inch wide and even in depth as if cut into her flesh by a noose. Her hands were never raised to her throat and her fingers, on being tested for their span, could not be made to overlap as the noose did. The mark lasted for about 40 minutes and her throat was sore for two days, affecting her speech. Was she reenacting, I wondered, a strangulation trauma attendant on rape, or was she hanging in her own body a man who assaulted her? Both the sun and the clergyman are father symbols. Her passionate praise of her father might have been a repressive act. The cross with which her father marked her breast when in a vision he tore her away from her husband might have been another transposition from below to above. It is easy to understand how the repressed memory of an assault by her own father would stand between her and her husband, but it is equally possible that instead of the clergyman being a substitute for the father, the father of her earlier vision was a substitute for a renegade clergyman. Before her marriage she wanted to be a nun. The desire haunted her from early childhood and it is tied up with several ghostly experiences.

At the age of 6, recovering from tonsilitis, a black arm like a negro's hand with big bulging muscles descended over her head and threatened to choke her. She never forgot the experience and could not accept the explanation that it was a dream.

At the age of 7 she lived in a house that was said to be haunted. The windows and mirrors were mysteriously cleaned during the night no matter how dirty they were made during the day. The idea struck me that this may have been the earliest manifestation of the Poltergeist, expressing the frenetic unconscious desire of a sleep-walking child to have her purity restored, so that she could see herself in the mirror immaculate.

Later she used to see a ghost step out of a cupboard. It always disappeared before she could see its face. One afternoon, at 16 when she was in bed with a headache, the figure stepped out fully in daylight. She fainted or fell asleep. On waking up, she found by her bedside a piece of paper with smudgy writing as if done in soot or charcoal. Her mother took it and threw it into the fire.

Scrawls and smuts on a scrap of clean paper! It looked as if she was attempting to write out an unconscious confession. If so, we can understand why the desire to become a nun should have returned at this point. I suddenly remembered a report about greasy fingermarks on the mirror in Mrs. Forbes' house before the Poltergeist outbreak outbreak began. They were said to have followed her husband to the

houses where he worked as a painter. Mene, Mene, Tekel, Upharsin! The writing on the wall!

Tragically, Mrs. Forbes was the victim of a ghastly mistake. She hated her husband for an act of which he was entirely innocent and she did not know that she was hating him. On her wedding night, she cried hysterically and had a fainting fit. The act of intercourse reactivated her trauma of rape and in the mental confusion which resulted from the mobilization of the vague horrors of the past, she identified her husband with her first assailant and made him the butt of her vindictive feelings. That is why she could not tell her husband of her visits to churchyards, that is who she was bringing pieces of gravestone home. The aggressive fantasies recoiled on her and brought on her suicidal fantasies and her hysteric blindness. Once during our experimental period she reported in some alarm that her eyesight was again beginning to fail. I found out that she had a violent quarrel with her husband. Radical measures were needed, so I told her that she hated the sight of her husband and as she could not blot him out, she blotted out her own vision to save herself and punish herself. She went white and protested in tears that she loved her husband, but by next morning her eyesight was better and the danger of hysteric blindness vanished.

Unfortunately, the investigation came to an end before the memory of rape was recovered. In trance, the rising of the memory was indicated and she uttered piercing screams as she struggled against it. My investigation was now taking a more and more pronounced psychoanalytic turn. To my regret, as my work proceeded, the committee of the Institute became more and more uneasy as to the possible moral reaction of the membership to the rumored findings. They wanted to close the case and intimated that my conclusions were reprehensible. As a result, the break became inevitable and the greatest Poltergeist mystery of the times never reached the stage of complete solution.

However, the results obtained so far justified all the efforts spent and may stimulate others to continue the psychoanalytic investigation of similar occult manifestations. For sixty years Psychical Research has gone around in a vicious circle because it has failed to give due consideration to the essentially psychological nature of mediumistic phenomena. I am convinced that the exploration of the unconscious mind of mediums by the means provided in psychoanalysis, would solve many mysteries and would lead to discoveries of considerable importance both to psychology and psychical research.

DISCUSSION

GUSTAV BYCHOWSKI, M. D.: It was a privilege indeed to read the manuscript of this most interesting paper. A discussion which would do justice to its value and would mention all the outstanding problems raised by the author would require another lecture. Therefore, I shall limit myself to a few points and I shall divide my remarks in two parts; first, I shall consider some clinical points of the paper and second, I shall discuss some general problems of occultism.

The diagnosis of the case may raise some doubts. I certainly agree with Dr. Fodor that we deal here with a serious dissociation of personality. It may well be that in further development the case would become a schizophrenic psychosis. However, the material presented seems to warrant the diagnosis of a severe hysteric dissociation. Some outstanding clinical features plead for this point of view. Symptoms of the vegetative stigmatization so outstanding in this case bear obvious marks of autoplasmic tendency so characteristic for some hysteric individuals. May I remind you here that the term autoplasmic was designated by Ferenczi and accepted by Freud to contrast the alloplasmic tendencies characterizing the individual who, in his striving for satisfaction of his desires, changes reality. The autoplasmic tendency instead implies alteration of one's own body. In this case we have to do with a particular interesting tendency toward automutilation. The aggressiveness is directed first toward the husband of the medium, then turns toward the medium itself. However, instead of merely mutilating herself consciously or unconsciously, she expresses this hostility in realizing through the channels of the vegetative system, the fantasy of strangulation. Analogies with famous stories of stigmatization of saints suggest themselves immediately. I agree with the interpretation of the author that those tendencies form the part of the suicidal complex of the medium. The undeveloped multiple personalities which were an expression of the fantasies and unconscious attitudes of the medium are particularly interesting in view of comparison with the classic cases of multiple personality. The relationship between this particular form of hysteric dissociation and mediumistic phenomena was demonstrated in a classic way in the famous study of the Swiss psychologist, Flournoy, entitled "*Des Indes à la Planète Mars*."

The association between the return into the womb and the death are particularly impressive. The search for the grave which seems to

be an expression of her longing for the father reminds me most vividly of another famous case of love for graveyards. As you know, it was Edgar Allan Poe whose most beautiful love stories were so often connected with dead women. Psychoanalytic studies (Princess Marie Bonaparte) have revealed that this search was a manifestation of his eternal longing for the mother lost in early childhood.

The symptom of hysteric blindness and its rapid disappearance after the interpretation is extremely interesting and shows how the tendency towards self-damage serves the feeling of guilt and the punishing super-ego. Incidentally, this symptom in its rapid course would also favor the diagnosis of hysteria.

I fully agree with the general interpretation of mediumistic phenomena offered by Dr. Fodor. In my experience I also found that the tremendous narcissism and exhibitionism of this frustrated individual was nurtured and overdeveloped by the attitude of the group fascinated by the "supernatural" manifestations and pressing the medium with constant demands. We are dealing here, of course, with phenomena of group psychology. A spiritualistic group develops a deep mutual identification which not only may increase some phenomena, but may even be instrumental in provoking collective illusions and hallucinations. Dr. Fodor seems to offer a very interesting example of such a phenomenon in his description of the smell of the zoo experienced by the ladies who observed Mrs. Forbes.

And now I come to the second part of my remarks which concerns the general study of occultism. There is no doubt that despite all the occurrences of fraud which this field seems to invite, some of the so-called occult manifestations are an object of certain observation. Freud has described cases of telepathic dreams and I myself have observed cases of telepathic dreams and I myself have observed several instances of transmission of thoughts. In such cases it really seems as if some old primary identity between one individual and another could be reestablished, so that what the old Indians called the "illusion of veil of Maya" would disappear. This illusion, as you know, concerns the multiplicity of individuals. After the illusion was removed the individual could return to the old identity and unity with the Atman. Since the magic thinking is essentially concerned with the removal of barriers of time and space we understand the fascination which telepathy exerts on the human mind anxious to regain the oldest forms of its functioning.

It may well be that some forms of psychic experience, such as mystic ecstasy, a deep penetrating love relationship or the like can tempor-

arily achieve some elimination of those barriers without which the human mind cannot function in the world of reality. However, it seems most strange that sometimes this sort of identity manifested in transmission of thoughts may appear rather in a relationship between two strangers than between two people who know each other intimately. I, for my person, am convinced that some particular individuals have this (to me incomprehensible) ability to reflect and to perceive the thoughts of strangers without the help of any verbal or mimic communication.

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PAUL FEDERN, M. D.: First of all I want to express to the speaker thanks and admiration for his work. We all were fascinated by the facts he found and impressed by his theoretical deductions.

My own experiences in this field are slight. In Vienna I had about ten sessions with the famous "medium" Rudi Schneider. He put himself into a state of deep hysterical trance, but nothing else ever happened. The same was true with other mediums. Thus I come to the conclusion that I and some other scientists, whose minds were trained in methodical critical thinking, unconsciously interfered with the medium's ability to regress to the level of primary unconscious processes. I also observed a famous "Poltergeist" for many hours without any success; but when I was in another room, many acts of nuisance destruction of objects took place, objects which were out of the medium's reach.

Yet, I am not a sceptic; the witnesses who reported that in their presence things in the room fell from the wall or table, or were thrown through the air or broke in the air, were known to me personally and certainly did not lie.

Fodor by the use of psychoanalysis laid bare the dynamic source of a "Poltergeist carrier," a source from which the carrier draws his Poltergeist power. In accordance with Freud's statements about hysteria, Fodor stated that this source lies in the medium's unconscious with its deep specific urges which are repressed and therefore unknown to the carrier. Fodor performed even a treatment of the Poltergeist carrier. Like in any other case of hysteria the unconscious trends were stimulated by early childhood traumata. It is not certain however, that the rape, which was uncovered by the psychoanalysis of the carrier, happened in reality; it may have happened only in the child's fan-

tasy. In hysteria the sources of later symptoms can have been mere fantasies which possessed the dynamic value of what Freud called a "psychic reality." However, Fodor had the impression that the woman was actually raped when she was a child.

Most important is the psycho-economical aspect of the case. Top-icity, i. e. the question as to whether the process is conscious, preconscious, or unconscious; dynamism, i. e. the kind of energy involved, libido or mortido; economy, i. e. the quantities of mental energy involved—all these factors have to be investigated in every theoretically complete psychoanalytical inquiry.

In the case of the Potergeist carrier the UCS. energy quantities must have been extraordinarily great. It seems probable that the extraordinary performance power of mediums stems from stronger urges, urges which were dammed up by accumulated frustrations, that they express themselves more intensely than those which are working in normal people or in the usual type of neurotics. This point of view may be exemplified by a case of kleptomania I analyzed 20 years ago. The patient could not resist her urge for stealing jewelry. During the treatment she fought strongly against her urges and succeeded in regard to minor objects. During this period it frequently happened that she coveted something while shopping for her daily needs. When she came home she then discovered that the coveted objects were in her bag wrapped in paper; they found their way into her pocket without having been paid for. The kleptomaniac wish was apparently so strong that it communicated itself to the clerk behind the counter and made the clerk hand over the goods without conscious awareness; all this happened by an automatism. Similarly, Fodor's Poltergeist medium must have influenced her surroundings, thanks to the very strong cathexis of these mental processes. It is for this reason that I assume the existence of undirected mental processes in the central nervous system. Smell hallucinations are rare experiences. The Poltergeist carrier induced other people to share her own hallucinations. I wonder whether the Poltergeist medium also has influenced other people to throw objects by unconscious automatism.

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JOSEPH WILDER, M. D.: It is very important from the point of view of the value of the scientific record to know how long it took Dr. Fodor to get the first evidence of fraud or unconscious production of these phenomena. Concerning the violet smell, we are dealing here with

a psycho-somatic phenomenon. If I were a medium I would have no difficulty in producing such phenomena. All one has to do is what the prostitutes of ancient Rome did: drink a tablespoonful of turpentine oil and urinate afterwards. The urine then has a very strong smell of violets. I remember the case of a patient who wanted to commit suicide by drinking turpentine oil. The hospital room smelled of violets for a number of days.

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DR. NANDOR FODOR: The speakers have raised interesting problems. I know of Rudi Schneider, Elynor Zugun and Dr. Tanagras telepathic group at Athens University. Rudi Schneider seemed to have lost his power after his marriage. Before, his female trance personality, "Olga" was much in evidence and was apt to make love to people in the dark, revealing a strong homosexual urge in the medium.

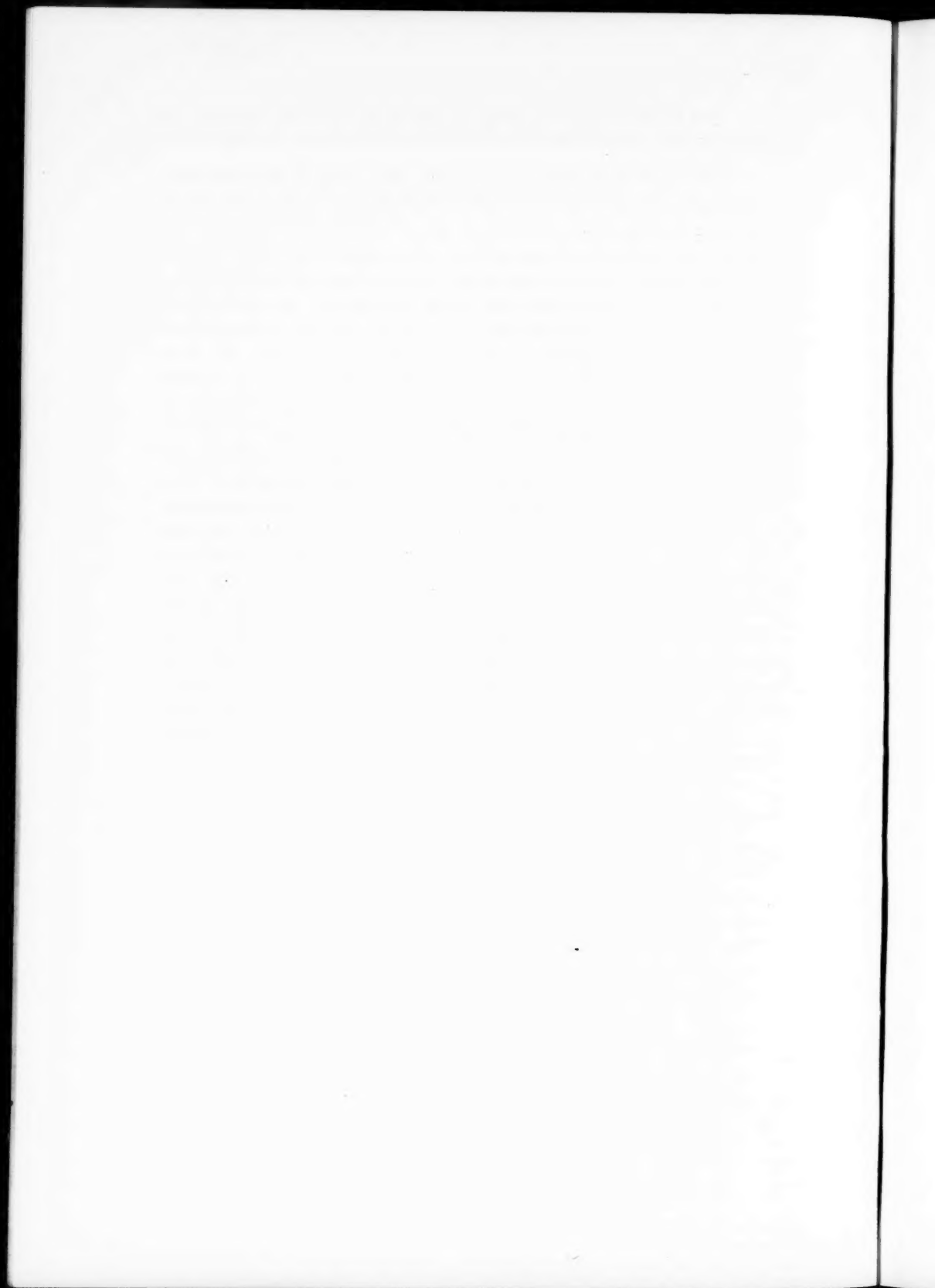
However, my experiments with Dr. Tanagras' group furnished evidence of genuine telepathic transmission. The issue of mental suggestion and collective psychic contagion raised by Dr. Bychowski and Dr. Federn is important. It happened several times that the "apports" came in accordance with wishes expressed. On one occasion, for instance, at the medium's house, I expressed the wish to have another Roman lamp, but this time of terracotta for an apport. Soon afterwards I found a beautiful terracotta Roman lamp on the seat of the toilet in the medium's bathroom. It was so fragile that any throwing would have smashed it to pieces. I don't believe I had a premonition of what was coming. I think the medium threw out the suggestion of the terracotta lamp. On many other occasions I may have failed to catch it. This time I did.

I believe the fetid smell of the tiger was similarly projected. I never had occasion to observe it. Only few people were affected by it. But the smell of the violet was evident to a large number of people. It was not on the medium's body. It did not emanate from her garments and it was never smelt in the ladies' room. It hung about the room in clouds and persisted for an appreciable time. Observers could walk into these clouds and out of them. We never found out how these smells were produced.

As for fantasied or actual rape, I don't believe that the fantasy alone could account for the violent nature of the phenomena. If it would, it might never be possible to distinguish between actual and fantasied events.

The kleptomaniac issue is more pertinent. Mrs. Forbes did commit psychic shoplifting. She claimed that objects in shopwindows or on trays in shops followed her if she gazed at them intently, that rings found their way to her finger and necklaces clasped themselves around her neck, so that she was afraid to go into the shops and look at things. At one time I thought I had become her accomplice. We took her to Bognor and walked with her into a Woolworth and asked her to select something from the jewelry counter but then put it back. Six of us were watching her and became satisfied that the ring which she selected remained on the tray. We left rather hurriedly because the shop assistants became suspicious of our behavior and it occurred to me that if Mrs. Forbes can do what she claimed, we would have a hard time to explain to the Magistrate the Poltergeist. We got out safely. Mrs. Forbes walked with me, holding a small box between her clasped hands. The idea was that the Poltergeist should deposit the selected ring into this box. Barely a hundred yards from the shop, there was a rattle in the box. I took it from her, opened it and there was the ring. My flesh crept. Here seemed to be the foolproof evidence of the powers of the Poltergeist — until it occurred to me that all articles in Woolworth are of the standard type, and it would have been quite simple for her to select a ring in advance, hide it on her person and get it into the box, thus creating the appearance that the ring was the same one which she picked up in our presence. On the strength of this theory I was willing to risk my freedom.

As to the time which it took to get the first evidence of fraud, the answer is not very simple. I was out to find fraud from the very first, and damaging observations were made from the second day on, but clinching evidence did not come until the X ray experiment, some two months after the beginning of the experiments. I knew that many of the results could have been produced by fraud and that many were, but there was little scientific value in that discovery. We had to pursue the investigation in more and more stringent conditions to see if the Poltergeist remained active when all possibilities of fraud had been exhausted. The whole investigation was very exciting and it would be exceedingly difficult for me to try and convince this audience of that which remained as indicating genuinely supernormal causation. The best I could do is to re-quote a statement of Dr. Treviranus to Coleridge: "I have seen what I would not have believed on your testimony, and what I cannot, therefore, expect you to believe on mine."



THE CONVERGENCE BETWEEN DELUSION AND MOTOR BEHAVIOR IN SCHIZOPHRENIA

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I proposed to describe certain effects of insulin-therapy in a case of schizophrenia which illustrate a statement made in one of my previous publications: "A dynamic conception . . . compels us to distinguish clearly between alternative symptoms at a given stage of the disease, and chains of symptoms during the course of the disease."⁽¹⁾

The case under study suggests that one of the results of insulin therapy may be the shifting of symptoms from one integrative level to another, and, more especially, from a higher level to a lower level. The functional nexus between the two sets of symptoms seems rather close, though by no means perfect, in the case under study. Whether or not we are dealing here with true conversion phenomena must remain undecided. Peculiar forms of motor behavior in schizophrenia are quite common, and it remains to be shown whether they should be interpreted as symbolic expressions, organically conditioned symptoms or unconsciously motivated escape or substitute phenomena.

One reason why no attempt is made to give a definite answer to this important question is a purely technical one. The patient's early symptomatology had to be culled from hospital records, since he did not come under the author's observation until September 1939. Under these circumstances it seemed wisest to present the bare facts, with a minimum of interpretation.

CASE HISTORY

F. M. was born in 1916 of mixed French-Canadian (father) and Irish (mother) stock. There is a possibility, but by no means a certainty, of poor heredity. The patient is asthenic in build. His intelligence is low average. His environmental background is urban, and his economic condition has been rated as marginal. He is a Roman Catholic. In brief, while patient is not a "marginal man" in the strict sociological

sense of this term, he nonetheless belongs to an ethnic minority, whose life-chances in New England are below average.

Patient was a sickly child up to the age of ten. He allegedly suffered from "broken glands" and is said to have had some kind of glandular therapy. He had only a common school education. In the ninth grade he hurt his knee playing football, and was out of school for several months. Thereupon he refused to return to school, because he did not wish to be in the same class with younger pupils. Since that time he was employed on work relief projects.

As a child patient was always anxious to have his own way, and tried to direct the play activities of his playmates in accordance with his whims. There is no history of heterosexual or homosexual interests. It is known, however, that patient was rather shy of girls.

Approximately ten months before his admission patient's mother brought home a book about the life of Jesus. Patient read it and became preoccupied with religious matters. Six months later he began to hear voices. He could hear the silent voice of Jesus and also the voice of Jehovah. He was influenced to write letters of exhortation on church unity. He saw nine burning crosses, which signified that he had to be tortured and purified for nine months by Jesus, previous to being admitted to Heaven. The Saints too had to endure such trials. The torture consisted in having needles and a "fine instrument" inserted in his head and rectum by Jesus. Jesus also had a hook put into patient's neck, causing him to jerk his head. His head-jerking started several months after reading the book about Jesus. At the same time he also had a "pounding feeling in his head." Since then Jesus further tortured him by putting salt and other "terrible tasting" substances in his mouth. Another form of torture was the fact that Jesus caused him to masturbate without any thoughts or fantasies about sex. Patient viewed his masturbation as a manifestation of Jesus' own desires through the patient's person. Jehovah did not, however, approve of Jesus' actions, and threatened Jesus with retribution if he did not leave patient alone. Patient felt that Jesus was envious of Jehovah's liking for patient, and tortured him not for the purpose of enabling him to go to Heaven, but from envy. Jehovah urged patient to marry a girl whom he had not yet met, but Jesus interfered with this project. Patient was told that he ought to have a son, in order not to embarrass Jehovah, who is a father, by his sexual purity and aloofness.

In January 1938 it became necessary to have the patient admitted to Boston Psychopathic Hospital, when patient realized that the period

of torture had exceeded the expected period of nine months by two months. Patient concluded that Jesus had lied to him and had deceived him. He felt quite bitter about this. He now realized that Jesus had been "working on him" for years, causing him to be lonely and to lack girl friends. The admission-note states that God spoke to the patient and stuck needles and "an instrument" into his head and rectum.

In February 1938 patient was admitted to Worcester State Hospital. He was described as euphoric and showing inappropriate affect. He could demonstrate the head-jerking when asked to do so. (Physical symptoms: Acne vulgaris, facial dysymmetry, throat mildly injected.) On February 16th patient was transferred to the Research ward.

After admission to Worcester State Hospital patient was told by "Jesus' father" that patient was actually Cain, who "did something to his brother James Zebedee, the disciple of Christ." Patient was also St. John of God (St. John the Divine?), as well as King John (Lackland?) of England. (Note that St. John the Divine was the "disciple whom Jesus loved," and that John Lackland had serious difficulties with his family.) Patient had several mothers, among whom he remembered three, however: Eve (mother of Cain), Salome (who, it will be remembered, caused St. John the Baptist to be beheaded) and his real mother. Patient found out about all this through Christ, who even "controls" his tongue on occasion, to express his (Jesus') own thoughts, just as (*vide supra*) he caused patient to masturbate in his stead. In brief, we are dealing here with an equivalent of primitive theories of "possession."

Patient further realized upon admission that the patients in the hospital were possessed of the devil, and that patient had been sent to the hospital by Jesus, in order to punish the patients, preparatory to their going to Heaven.

On March 22, 1938 patient was diagnosed as a paranoid dementia praecox case.

On March 12, 1938 the notes describe in detail the occasional tic-like movements of patient's head, the head moving at that time toward the left. The movement was described as rapid and jerky in character. Patient seemed to display a considerable preoccupation with his delusional system, but, at the same time, seemed to take Jesus' interference with his affairs with equanimity. There was a distinct indication of a flattening of the mood.

The delusional system seems to be a singularly transparent approximation of the Oedipus situation, and appears to involve many elements of sibling rivalry. The distorted interpretation of the person and role

of Jesus is particularly interesting, since he appears in this delusional system as the equivalent of the "spoiler" or "trickster" of many primitive mythologies, e. g. of "Old Man Coyote" in the mythology of many North American Indian tribes. The whole system is too transparent to stand in need of a detailed interpretation, except to note that it is singularly elaborate, especially as regards the skillful use made of historical personalities, which is rather striking in a patient as poorly educated and as unintelligent as F. M.

The references to "primitive possession" and to "tricksters" must not, however, be interpreted as supporting in any way theories about "primitive archaic thought" in schizophrenia, which some have wished to rename paleophrenia. The analogies rest upon a complete misunderstanding of the logic of primitive tribes. It is well known that primitives like everyone else, think "prelogically" only in situations of stress.

The course of insulin therapy was as follows:

March 26, 1938. During the past week patient received insulin on five occasions, in doses ranging from 50 to 75 units. No coma occurred during the 4½ hours of hypoglycemia. No change was observed.

April 2, 1938. During the past week patient received four insulin treatments. The doses were increased up to 105 units. There was no coma. Patient spoke less of religious matters, but continued to feel persecuted by Jesus. The head-jerks became less frequent.

April 11, 1938. The insulin treatment was continued, with doses remaining on the same level. There was no coma. The patient was rated as improved. He stated that he "got rid of a lot of crazy notions." No head jerks were noted.

April 16, 1938. The insulin doses were increased to from 110 to 125 units. Coma occurred for the first time on April 12. The patient was found free of religious notions.

April 23, 1938. Patient had five treatments during the past week. Each dose amounted to 135 units. Patient was rated as improved and as having more contacts.

April 30, 1938. Better comas were obtained. The head-twitching reappeared, however.

May 7, 1938. Patient received four insulin treatments during the week, of 135 units each. There were further head-jerks, and ideas about being persecuted by Jesus continued to persist. Jesus was occasionally using patient's voice to express himself.

May 14, 1938. Patient received four treatments of 135 insulin units each. The comas were superficial. No changes were noted.

May 21, 1938. Patient received four insulin treatments of 135 units each. Coma was obtained. No changes were noted.

May 27, 1938. Little initiative is exhibited by patient. He spoke especially vaguely when asked about his former delusions. He now recognized them as delusions and laughed at them. The tic-like movements of the head continued to persist, however.

May 31, 1938. Patient had seven treatments of 130 units each. The record states that he had no insight, yet it is noted that he laughed at his past notions, which does show some insight.

The treatment was thereupon discontinued. On July 9, 1938 patient was sent home to visit his mother and was placed under the supervision of the Social Service of Boston Psychopathic Hospital. Patient found some relief-work and seemed to make a good home adjustment.

May 13, 1939. Patient's mother noted that patient was sticking pins into his body and was bumping his head against the wall. Patient was readmitted to Boston Psychopathic Hospital where it was noted that he had a coarse tremor of the extended hands. The record also reports an excessive motion of the external laryngeal cartilages, an excessive movement of the left side of the face, a tic-like motion of the left eyebrow and the fact that patient was holding his head to the left.

May 24, 1939. Readmitted to Worcester State Hospital patient was found free of religious notions. It is reported however that a number of new symptoms had appeared since the patient was sent home on a visit. The following new symptoms are mentioned: Open masturbation, sticking pins in his body, increased jerks of the head, and, during the visit, strange postural behavior, such as walking down the street bent double, raising both arms suddenly in the air, jumping up and down, etc.

May 27, 1939. The patient did not masturbate openly in the hospital. He kept on holding his head to the left and showed a tendency to grimace with the left side of the face.

November 23, 1939. Patient was seen by the Clinical Director who envisaged the possibility of Bell's palsy. No findings are on record, however.

February 14, 1940. The annual summary recounts the previously observed symptoms and notes the absence of hallucinations or delusions. The patient continued to grimace, and it was noted that queer motions occurred when patient thought himself unobserved.

February 27, 1940. Patient explained that his rapid head-jerks were just a nervous habit, like the interviewing physicians habit of playing with his pencil. The interviewing physician stated "It is possible that

his mannerism has not increased, but that more attention was paid to it by observer."

March 11, 1940. Patient's mannerisms were definitely on the increase, and his head-shaking was accentuated. No delusions were noted. Hallucinations were also absent.

March 26, 1940. A further increase in mannerisms was noted.

April 1, 1940. A moderate increase in mannerisms was noted.

May 27, 1940 (Annual summary). The patient displays an increased apathy. At least three instances of behavioral confusion were observed. During these periods there is an increase in facial movements and a decrease in verbal output. Patient asserts that he was brought to the hospital because of too much drinking. There were indications of a deepening of the psychosis.

June 19, 1940. Patient blinked frequently. There were no delusions. He burst out laughing in the ward and talked to voices.

June 23, 1940. Patient had no masturbation fantasies. He masturbated only for the purpose of obtaining relief from nervous tension. Patient used the same terms to explain the relief he derives from jerking his head. He asserted that he could voluntarily inhibit these head-jerks but, in doing so, the tension would become uncomfortable. The postures and tics hence seem to be alternatives for masturbation—at least in the patient's system of rationalizing his symptoms.

June 24, 1940. Patient blinked less. He also grimaced less. He denied hearing voices. Patient seemed to become more and more a case of simple deterioration. It should be noted that he was receiving thyroid treatment orally.

June 28, 1940. Patient blinked frequently and there were jerky lateral motions of the eyes. His apathy became quite conspicuous.

July 5, 1940. No change was noted, except that patient seemed irritable when asked to discuss sexual topics.

SUMMARY

During the latter part of the insulin medication, when there occurred a disappearance or at least a very considerable attenuation of the delusions, there took place a revival, and a progressive intensification of the head-jerks. Postural mannerisms and open masturbation increased during the home visit to such an extent that readmission became necessary. Since his insulin treatment patient has been almost entirely free of abnormal thought-content, but became increasingly apathetic.

INTERPRETATION

The nexus between the initial delusional content and the postural symptoms more or less superseding delusions after the administration of insulin, seems obvious.

During the pre-insulin period we noted:

Masturbation due to coercion by Jesus. Head-jerks due to a hook in patient's neck, which was manipulated by Jesus. Patient imagined that needles were stuck into him. Evil-tasting substances were put into patient's mouth. There was a "pounding feeling of the head." There were also numerous delusions and implicit indications of crucifixion-fantasies.

During the post-insulin period we note:

Masturbation due to the need of allaying tension. Head-jerks likewise due to the need of lessening tension. Patient actually stuck needles into his body. Patient swallowed constantly, and actually pounded his head against the wall. There seemed to be few or no delusions. The implicit crucifixion fantasy seemed to be carried out in an attenuated form by raising both hands in the air, jumping up and down and walking in a greatly bent posture.

As regards affect, it is interesting to note that whereas initially the patient seemed to take Jesus' interference in his affairs with some equanimity, to the point of showing flattening of affect, this trend eventually was exaggerated to the point of displaying apathy, in general. The case-history shows that the first two symptoms (masturbation and head-jerks) were initially coordinated with the delusional system, and, after the disappearance of the delusions, became grossly accentuated. The other symptoms were imaginary during the first period and took the form of overt behavior in the second period. The luxuriant and elaborate fantasy output of the first period disappeared as a result of insulin therapy, and the content of the fantasy-system was actually enacted, with a concomitant accentuation of deterioration and apathy.

This deterioration and apathy may well be connected with the fact that the patient finally began to "live" his previous delusions. The pent-up affect of anticipated or imagined future action would naturally tend to dribble away in the act of carrying out the anticipated action.

One possible explanation of the convergence of these series of symptoms, which shifted from the cortical to the motor level may be based upon Wall's⁽²⁾ theory of initial regression, and of a repetition of the

stages of psycho-sexual development in insulin therapy. Assuming that Wall's theory is applicable in this context, it may be asserted that the insulin-therapy stopped before the patient progressed far enough in his second ontogenetic development, and hence remained fixated at a stage characterized by the primacy of the postural level over the cortical level. Such an interpretation of fixation implies the hypothesis that conflicts will be expressed by symptoms manifesting themselves on the dominant level, i. e. the level of integration used most consistently in the process of adjusting and adapting oneself to reality.⁽³⁾

This view is partially validated by the observation that war-neuroses in officers involve primarily cortical symptoms, while in soldiers war-neuroses generally tend to take the form of conversion hysterias. It is explicitly recognized, however, that the views just expressed are nothing more than a tentative working-hypothesis, which still stands in need of both a clinical and a theoretical validation.

"Conversion"-like symptoms in schizophrenia have been noted before, but are by no means frequent. Nor have they been adequately analysed. The present report is hence primarily a contribution to clinical caustics, rather than to theory. No adequate interpretation of such phenomena can be attempted without surveying a large amount of clinical data of this type, and without the development of a systematic theory to account for them.

FOOTNOTES

1. Devereux, G. A Sociological Theory of Schizophrenia. *Psychoanalytic Review*, 26:315-342, 1939.
2. Wall, C. Observations on the Behavior of Schizophrenic Patients Undergoing Insulin Shock Therapy. *Journal of Nervous and Mental Diseases*, 91:1-8, 1940.
3. Mowrer, O. H. and Kluckhohn, C. Dynamic Theory of Personality (*in*) Hunt, J. McV. (Ed.) *Personality and the Behavior Disorders*, New York, 1944. 2 vols. (Vol. I. pp. 69-135, esp. pp. 71-72) This essay is quite fundamental for the distinction between adaptation and adjustment.

CLOSED TRAUMAS
OF THE CONVEXITY OF THE BRAIN –
A CONTRIBUTION TO THE STUDY
OF TRAUMATIC DEMENTIA*

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The various types of neuro-psychiatric disturbances resulting from closed traumas of the skull depend on the character of the trauma, the severity and extent of the injury, the localization, and a number of complicating factors. Setting aside the severe psychoses of the exogenous type, we can group the symptoms of closed traumas of the brain in a number of classical types. The most frequent findings following closed traumas of the brain are: vegetative, vasomotor and vestibular changes with a pronounced psychic and somatic exhaustion (cerebral asthenia), an increased irritability, and a marked decrease of the ability to work. The intelligence, however, is intact. This form is mainly an affection of the brain stem, which is a characteristic of concussion. (In contusions, as is well known, one finds various local, predominantly cortical symptoms, depending on the localization; but stem symptoms are less evident.)

In this report we shall attempt to focus our attention upon a *special variation of the closed trauma* which is connected with widespread changes in the cortex of the convex convolutions of the brain. The usual forms of concussion produce chiefly stem disturbances. In the superficial convex-cortical type of concussion however, the specific feature differs to a certain degree from the usual type.

* * *

First we shall discuss some interesting cases.

CASE I

The patient is aged thirty-two, a gymnastics teacher with higher education. Prior to the trauma he was a perfectly normal person, both

* Translated from the Russian.

physically and psychologically. Three years ago he fell, head first. He was unconscious for a long time and later spent several months in a psychiatric hospital. (He was very excited and his consciousness was cloudy). On discharge he was classified invalid, "first group". He did not remember anything that had happened, did not work in his profession any more, became apathetic and helpless. Later, he got a job as a simple laborer (longshoreman). His wife had to take him to his job daily, as he was unable to find his way. Now and then he went through a state of excitement with senseless destructiveness and aggressiveness. He did not remember what happened during these episodes.

STATUS: A strong, well built man with well developed musculature. He likes simple physical work, but has no initiative and does only what he is told to do. When left to himself, he is silent and apathetic. But he is untiring in his work. He does not complain of headache, dizziness, etc. No vegetative or vasomotor disturbances, except for a peculiar oculostatic phenomenon which, however is not very pronounced: the patient likes to stand on his hands. That is, he can stand on his hands for a long time without any vasomotor reaction. (He demonstrated this at a meeting of the medical society.)

He gives the appearance of a somewhat lost and helpless person. He does not understand questions right away. He answers in monosyllabic, short sentences. His grammar is not always correct. He pronounces words and repeats them correctly. He does not remember the designation for some objects. He counts very poorly, at the level of the first five grades. He writes in short sentences and reads very slowly. His orientation as to place is only approximate, as to time, completely absent. There is a severe disturbance of memory. He does not remember recent or remote events and dates. He does not recall when the injury occurred or whether it is a long time since he has worked in his profession. He does not remember the names of persons close to him. He doesn't know anything about events of the war. His memory is especially severely disturbed as far as recent events are concerned. It is very difficult to focus his attention. His judgment is considerably diminished. He is unable to do any abstract thinking. His emotions however, are intact to a certain degree. He tries to grope his way home. When asked how he feels, he always answers that he feels fine. But when one points out his shortcomings (inability to count, etc.) he has tears in his eyes.

Spinal fluid shows 0.5 protein.

In conclusion, we find in this case a number of apathetic-aboulie phenomena, a complete absence of initiative, severe impairment of memory, speech disturbances, elements of amnesic aphasia and agrammatism, oligophasia, difficulty in the use of the language, acalculia and an occasional clouding of consciousness. But one does not find any vegetative-vasomotor or vestibular disturbances. There is no exhaustion, no headache, no dizziness. There also are no disturbances of the sensory organs or of the psychosensory functions. We find in this case diffuse cortical changes, (pointing toward a disturbance in the region of the frontal convolutions and that of the lower parietal lobes.) Basal symptoms and particularly stem symptoms are absent.

CASE II

This case is analogous to the first one:

The patient is a collective farmer, aged forty. His pre-morbid personality was perfectly normal. Several years ago he was injured by a log which fell on his head during a fire. He lost consciousness and was in a state of marked excitement. He received first aid and was sent to a psychiatric hospital where he remained several months.

After his discharge he was demented, did not remember anything, did not understand anything, worked only when the procedure was demonstrated to him and was able to perform only the simplest kind of work. Usually he was dull, apathetic. At times, he got into a state of excitability, did senseless things and was dangerous to his environment.

EXAMINATION: The outstanding findings were: a severe disturbance of the intellect and memory; changes in speech (elements of agrammatism, amnesic aphasia, disturbance of ability to speak); acalculia; apathetic-aboulie syndrome. Occasional episodes of disturbance of consciousness. In this case we also noted the absence of stem symptoms (vasomotor-vegetative-vestibular).

CASE III

A Red Army soldier, aged twenty, collective farmer. He completed four grades in school. In May 1942, he suffered a contusion. He was unconscious for several days, did not talk for 2 months. For six months he was treated at the hospital and then discharged. He was too helpless to get home alone. Two weeks later he was called up again, spent three weeks with his Army unit, and then was sent to the hospital.

He was very demented, did not remember anything, could not read or write, was very poor in counting (only up to ten). He could not find his own bed in the pavilion. He was aware of his disability and cried. He had a slight right hemiparesis (Barré's sign on hand and foot). Right upper tendon reflexes were present. There was no Babinski or any other pathologic reflexes. Power of the right hand was 13, of the left 25. Sensibility was not disturbed. Chronaxie showed heterochronism on the right side (enlargement of the chronaxie of the nerve was 5 to 2). There was no asymmetry of temperature. Pupil reaction was normal. There were slight vegetative-vasomotor and vestibular signs (oculostatic phenomenon). He was very emotional and cried when he could not carry out what he was told to do.

In this case, too, the cortical symptoms, that is those of the lower parietal and frontal lobes, were predominant. In addition, a slight hemiparesis was present. Stem symptoms were not very marked.

CASE IV

A Red Army soldier, aged twenty-eight. He suffered a contusion in January, 1943. Lost his memory. Can not read or do arithmetic. He can not visualize the faces of persons close to him. Is dull, apathetic, but very critical of his condition. No motor or vegetative symptoms. Slight oculostatic phenomenon. Spinal fluid shows increased pressure, increased protein (0.33). Occasional episodes of disturbance of consciousness.

CASE V

Analogous to the previous one. Red Army soldier, age twenty-three. He completed three grades in school. Contusion in May 1942. Lost his memory. Can not do arithmetic, does not remember his mother's name. Is dull, apathetic, depressed. There are elements of an amnesic aphasia. No vasomotor-vegetative or vestibular symptoms. Spinal fluid: increased protein.

* * *

We could present many more examples of this special type of closed trauma. However, we want to limit our discussion to the above described cases. They are sufficiently characteristic of the type we are interested in.

It is obvious that we are dealing here with a cortical lesion. The extent of this lesion is so wide that it comprises the frontal as well as

the parietal regions. This explains the extremely marked dementia together with the presence of some local symptoms. Stem symptoms are lacking or only mildly evident. Therefore, it is possible to state that the form described above is in almost complete contrast to the often observed stem disturbances following a concussion. The latter do not show cortical symptoms, that is, distinct defects of intelligence and memory. In the common contusions one observes localized cortical symptoms, but they are not as extensive, and do not lead to such a severe degree of dementia as are seen in the above mentioned cases. One can explain these extensive cortical symptoms by a traumatization of the convex convolutions on the surface of the brain. Attention has been called to such an injury which has been described as having the pathologic-anatomical peculiarities of traumatic injuries to the brain convolutions, particularly those associated with the findings of "état vermoulu" (the "worm-eaten brain").

The "état vermoulu" was described some time ago by Pierre Marie. He described it as one of the pathologic-anatomical varieties of arteriosclerosis of the brain. Alzheimer confirmed Marie's findings. However, it has been further proven that "état vermoulu" is a specific injury peculiar to traumas of the cortex and not to arteriosclerosis. This lesion is a sequence to the injury to the convexity of the convolutions transmitted through the impressiones digitatae of the skull. Necrosis and hemorrhage change the cortex in the course of the injury to a condition of the type of "état vermoulu". The injury herein is usually a multiple one and affects in depth only the superficial layers of the cortex; it does not extend deeper than the third layer. Different forms have been observed so far, depending on whether the injury affected the frontal, the parietal or the occipital brain convolutions. Nobody, however, drew attention to the possibility of a diffuse lesion of the above-described type, which affects the cortex of many regions.

In 1937 we had occasion to perform a pathologic-anatomical examination on a case with a marked "état vermoulu" following a severe contusion of the brain. I do not, unfortunately, have the case history at present. I do, however, remember it very well. The reason for this is that I showed the pathological specimen to physicians several times during practical demonstrations in pathology. I demonstrated the specimen as a typical "état vermoulu" which developed following a traumatization of the skull. The patient was a worker who met with an accident (trauma of the skull) during the building of the subway. The

clinical findings in his case consisted of a very marked dementia with paroxysmal attacks of excitement and clouded consciousness. The patient died on the psychiatric ward from an intercurrent disease.

We must assume that in cases of extensive "état vermoulu" we are dealing with an injury of the skull on its convexity. (For instance, in Case I it was a fall with the head downward, in Case II, an injury with a log from above.) Such an injury results in a damage to the frontal and parietal convolutions of the brain. Naturally, the depths of the brain fissures are never injured. We find therefore, that there is no impairment of the sensory and psychosensory functions; they are related to the deeper parts of the cortex. The fact that in the "état vermoulu" the superficial layers of the cortex are injured exclusively, may explain the lack of severe neurological symptoms and the predominance of psychic disturbances. As is known the disturbance of the third layer of the cortex is especially the basis for psychic changes.

The analogy of our cases with Pick's disease is interesting in this connection. In Pick's disease, too, we observe severe dementia with local frontal and parietal symptoms and also, preferably, an injury of the second and third layers of the cortex in the frontal, parietal and occipital fields. The similarity of the localization in Pick's disease and in a traumatic "état vermoulu" leads to analogous clinical findings in spite of the difference in pathogenesis.

We still have to answer the question why in our cases of convex contusions predominantly the frontal and parietal convolutions are injured and not the central. The difference in vulnerability of the different parts of the cortex depends on their unequal structure, on the conditions of circulation of blood, spinal fluid, etc. Nevertheless, we find in some cases of convexity traumas slight signs of injury to central regions. Characteristic here is the predominance of twilight states over those connected with convulsions. This can be related to the injury of the superficial "psychic" layers rather than to that of the deeper ("projection") layers. Furthermore, in Case III, we saw even a slight hemiparesis without the usual pyramidal signs. Such a paresis, which evidently is connected with an injury to the superficial layers of the motor region of the brain, ought to be called super-pyramidal (in the sense of Bielschowsky, Jacob, and others).

This type, described by us, is based on the development of an "état vermoulu" resulting from a contusion. It represents *an intractable, unchangeable injury which clinically corresponds to what is termed traumatic dementia.*

Of great interest seems to be another case with the same localization but reversible and obviously connected with different pathologic-anatomical findings. We want to present such a case briefly.

CASE VI

Patient M. from Azerbaidjan, a university graduate.

On January 7, 1943 he received a splinter wound in his head. The wound was situated on the margin of the left occipital and parietal lobes. The splinter did not break through the bone and could be easily removed. Despite this seemingly superficial injury we observed at first evidence of a severe illness: a prolonged loss of consciousness. For several days he could not speak or hear. Paresis of the right extremity was present, also convulsions of Jacksonian type on the right side and "unpleasant feelings" in the right hand. At the same time he had a marked decrease of memory, aphasia, alexia and acalculia. These symptoms disappeared gradually. By May 1943, the convulsive attacks ceased. The paresis disappeared almost completely. There were no pyramidal signs. His memory improved, he began to write and to count (though not as well as previously), his Russian language returned, but his native language remained deficient. There were elements of amnesic aphasia. His Azerbaidjanian kinsmen said that he spoke his native language as though he were a foreigner. The patient himself felt that he had difficulties in speaking his native tongue. During an attack of malaria at the beginning of May, his mental condition grew worse. Temporary mental deterioration in form of clouded consciousness set in and jerking of his right hand was noticed. X-Ray revealed the existence of crossed fissures at the site of the injury.

It was characteristic that in this case vasomotor, vegetative, vestibular and oculostatic disturbances were completely absent. We were dealing here, as in the foregoing cases, with a diffuse cortical injury without stem symptoms.

While dealing with a group of similar symptoms pointing to the localization of the injury common to both, we must emphasize that in this case injuries to the central convolutions of the brain, (pareses, Jacksonian convulsions) were more definitely determined, but the chief difference between this case and the cases described above, lay in its "mobility," i. e. in the reversibility of its phenomena. At the same time one must not overlook that although in this case we were dealing with an

apparent head injury, the splinter did not pierce through the skull completely, and in so far as the brain injury was concerned the trauma had to be classified as a closed one. Incidentally, similar injuries to the skull caused by a splinter are accompanied by fractures of bones, a fact which we observed also in this case. It is more than probable that the fracture brought about a subdural hemorrhage which, while it did not destroy the cortex, resulted in the disturbance of the cortical function on the convex surface of the brain. It is quite natural that in this case the stem functions have not been altered. In contrast to the "état vermoulu," we observed well-defined symptoms referable to the central convolutions. This can be explained by the fact that the subdural hemorrhage is extracortical, not connected with peculiarities of this or that region of the cortex, and spreads uniformly over the deeper levels of the cortex, involving the central convolutions together with others.

In summary we can say: We think that it is possible to separate the superficial and diffuse convex-cortical injury as a special type of closed skull trauma. This type differs from concussions in the following: stem disturbances are absent or appear only in a slight form, whereas severe mental cortical symptoms prevail. This type differs from the usual local injuries in the diffuse form of its distribution.

Our observations refute once more the obsolete opinion that if aphasia befalls a polyglot, the native language is invariably the first to be recovered. It is the language that is more closely connected with the mental life of a person that recovers first. Our case deals with an Azerbaidjanian who studied and graduated in the Russian language. The localization of the injury is also of certain importance. For instance, in the case of one polyglot who was injured, the classic languages (Latin and Greek) recovered, but not his native language—the former having been acquired visually, while the latter is always acquired orally.

Injuries are characterized by their localization, and usually do not confine themselves to the surface of the cortex. At the base of the diffuse convexity injury there is either an "état vermoulu" or a subdural hemorrhage. In both cases we are dealing with a disturbance of the functions of the superficial layers of the cortex; the difference lies in the fact that in the case of the "état vermoulu" we observe persistent defects of the intellectual — mnestic sphere, while the subdural hemorrhage shows a reversible form of these disturbances.

INDECENT EXPOSURE AND OTHER SEX OFFENSES*

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In most larger communities there are periodic so-called sex crime waves often preceded by one or more serious sex offenses which have received wide notoriety in the newspapers. Every sex offender is looked upon as a potential murderer. Emotions run high. There are meetings and conferences; recommendations are made and then gradually, as other issues preoccupy public attention, the whole matter is allowed to lapse into a state of quiescence. Meanwhile, sex offenses continue to occur.

About six years ago, shortly after one of these periods of aroused public emotion, the writer undertook to study cases of sex offenses sent by the courts to the Psychiatric Division of Grasslands Hospital for observation. Cases of so-called indecent exposure were the most numerous and formed a more or less well defined group lending itself to analysis and comparison with other sex offenses.

It should be pointed out that all of these cases of indecent exposure remanded for observation were men. The type of exposure is mostly not nakedness but quite specifically and almost invariably the exposing or demonstrating of the male sex organ to a passerby, usually to a woman, sometimes to children of either or both sexes. Sometimes the demonstration is accompanied by suggestive gestures. Sometimes the individual in question goes through masturbatory activity.

The incident usually occurs in some secluded spot such as a park. The woman in question reports it to the next policeman and the individual if he is still in the vicinity is apprehended forthwith.

There is usually a great deal of emotion aroused and displayed. The complainant, when it is an adult woman, expresses great disgust

* An Analysis of Cases of Indecent Exposure Referred for Examination to the Psychiatric Institute of Grasslands Hospital, Westchester County, N. Y., during the 10-year Period, 1934-1943. Acknowledgement is made of the assistance given to the author in the preparation of this article by Jean Kates.

and indignation. So great is the feeling that we often find it impossible to discuss the situation with the complainant in connection with our study of the case.

The police and courts tend to handle these cases with considerable severity. The police often feel called upon and feel justified in handling the culprit rather roughly; certainly more so than a comparable offender in other fields using the official classification and prescribed penalty as a basis for comparison. The individual is regarded with great resentment and suspicion. The handling of the individual implies a feeling that he is a potential menace, probably a potential murderer.

It was for the purpose of obtaining data on the indications, if any, for considering these offenders as potentially dangerous, that this study was undertaken.

Because they fall into a rather clearly defined group by the nature of their proclivity and because the individual's defensiveness made more intensive analysis impossible, a preliminary statistical study was undertaken, at first for a five year period and more recently for a ten year period.

It was during the first five year period that a so-called sex crime wave occupied the newspaper headlines in the community (Westchester County, N. Y.). It will be seen that the largest number of cases came under psychiatric observation toward the end of this time. The figures in this study cannot be taken as any indication of the occurrence of indecent exposure as an offense, or of the number of arrests for this or any other sex offense since, in Westchester County, there are many separate communities, each with its own police force and local court, and each with its own attitude toward psychiatry. Some of these local courts have never sent any cases of any kind for psychiatric observation. It may be assumed that many more cases of sex offenses were apprehended than were referred for psychiatric examination depending on the judgement and inclination of the individual judge.

Psychiatric examination of sex offenders is not a very satisfactory procedure at best, and that of cases of indecent exposure even less so. A study of most of the cases resulted in little more than a gathering of life history data, including such items as sexual and marital adjustment, from which inferences could be drawn. A checkup of the history of previous offenses was also accomplished.

It appears that when psychiatry is invoked at all, it is frequently brought in only at the tail-end of the proceedings. In our clinic at

Grasslands Hospital we have even had individuals sentenced to psychotherapy or sentenced to the penitentiary to be given psychotherapy while serving time. Individuals who have been thus sentenced rarely respond to the proffered psychotherapy. Indeed, in most cases, there is a stout and persistent protestation of innocence and a rejection of any intimation that there is any problem in the sexual area. This is particularly true of cases of indecent exposure. The individual in question often protests that he was surprised while merely urinating, and since incidents of indecent exposure frequently take place in secluded spots, there may be an element of plausibility in the story and he sticks to it.

The point is, that in the vast majority of cases the individual in question denies his guilt vehemently and maintains such a stout and plausible defense that psychotherapy is all but precluded.

The writer has seen only one case of indecent exposure who has not been to date apprehended and who has presented himself for psychotherapy. Only six out of the whole group of sixty admitted the sexual implications of their action. This is a much smaller percentage than the individuals who are charged with other sex offenses, at least among the cases who were sent for psychiatric evaluation. One may ask why individuals who are charged with a relatively lesser offense are so much less able to admit their guilt, often even after they have been convicted.

The answer in part may be found in the strong emotional reactions in the community against sex offenders which makes individuals so defensive that they cannot admit the sexual implications of their acts while there is any possibility for their actions to be interpreted in any other way, even though their persistent protestations may be obviously little more than a face-saving device. It is often as though the individual cannot admit even to himself the sexual nature of his actions because of his own participation in the attitude of the community. As we shall see, our study of cases of indecent exposure bears out that the individual's attitude to his own sexuality plays an important role in this connection in that so many of these individuals have a rather inhibited, even puritanical attitude toward sex.

The following study represents a combing over of all cases involving sex offenses sent to the Psychiatric Institute at Grasslands Hospital for observation, examination, and report by local courts, including the County Court, over a period of ten years from 1934 to 1943 inclusive. Most of the cases were known to the writer personally and were either examined by him or, if examined by a colleague, were discussed in conferences at which he was present.

The records of cases of indecent exposure were examined particularly carefully in terms of the following considerations:

The usual statistical categories of sex, race, age, marital status, religion, and national antecedents were recorded. Intelligence, education, and occupation were evaluated as well as family constellations and parental attitudes toward sex when available. The patient's manifest sex attitude was carefully evaluated from the individuals own statements, statements made by members of his family and others including teachers, clergymen and business associates as they were recorded on the patient's hospital record. Special attention was given to evidences of aggression both in the sexual field and in other ways, particularly any previous sex offenses other than that of indecent exposure.

The total number of cases of indecent exposure was sixty compared to a total of 105 other sex offenses, or somewhat less than one third of all sex offenses, certainly the largest single group. The other types of sex offenses included rape and attempted rape 11 cases, incest 4 cases, impairing morals of a minor 46 cases (except when this consisted of an act of indecent exposure in which case it was classified with the indecent exposure group), homosexuality and sodomy 22 cases, assault with sexual intent, disorderly conduct when this consisted in some overt sexual approach including "molesting" girls and young women, snipping hair, etc. 22 cases.

The yearly distribution of the cases of indecent exposure and the other sex offenses is of some interest:

	'34	'35	'36	'37	'38	'39	'40	'41	'42	'43
Indecent Exposure	0	0	6	12	9	8	5	4	6	6
Other sex offenses	9	7	19	37	26	20	9	8	1	3
Total	9	7	25	49	35	28	14	12	7	9

The years 1937 and 1938 were the years of the sex crime wave. It is interesting to note how the number of cases referred for psychiatric observation increased and then fell off. The proportion of indecent exposure cases rose steadily until in the last two years of the ten year period they exceeded the other sex offenses. The writer is at loss to explain this phenomenon.

The monthly distribution of cases of indecent exposure and the other sex offenses over the ten year period are as follows:

	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Indecent Exposure	2	2	4	8	7	8	5	6	5	8	3	2
Other sex offenses	10	5	2	8	7	6	14	17	8	14	10	6
Total	12	7	6	16	14	14	19	23	13	22	13	8

There is a definite elevation in the number of cases of indecent exposure during the months of April, May and June, and throughout the summer, whereas the offenses were at a minimum during the cold weather months of Nov., Dec., Jan., Feb., and March. This may reflect to some degree the number of cases and is probably reflection of the fact that indecent exposure is primarily an out of doors offense and a park and parkway offense. There is no such trend discernible among the other sex offenses reflecting their heterogenous character.

All of the cases of indecent exposure were males. There were fifty-six whites to four colored in the indecent exposure group (only ten colored in the total of 165 cases of sex offenses).

It must be emphasized again that these figures do not represent any index whatever of the frequency of the occurrence of those offenses in the community but represent only the cases remanded for psychiatric examination.

It is not easy to explain the low percentage of Negroes except that members of this racial group who are charged with sex offenses are not so often remanded for psychiatric examination. This may be because sex offenses are more often taken for granted among Negroes who are probably more usually sentenced without recourse to psychiatric examination.

There were twenty-seven married men to thirty-three single men in the indecent exposure group. Of the married men, six had been married recently enough to suggest some correlation between the marriage and indecent exposure, although impotence was not established among them. However, frigidity of the wife or other marital incompatibility was mentioned in ten of the records of the married cases.

Of the single men, excessive attachment to the mother was mentioned in nine cases and was related to shyness and reticence in the individual.

Examination of national antecedents revealed that fourteen of the cases were foreign-born, nineteen were first generation native-born, of

one or both foreign parents, twenty-seven were native-born Americans of American born parents.

There is a pretty even distribution of cases of indecent exposure on the score of intelligence and education, although a few facts stand out. Unfortunately, not a large enough proportion of the sex offenders as a whole had formal psychometric examinations to make the figures mean anything at all. In the indecent exposure group forty-eight of the sixty had psychometric examinations. Of the forty-eight there were eighteen with an I. Q. below 80. There were nine with an I. Q. between 80 and 110, or in the "normal" range. Twenty-one had I. Q. ratings above 110. These figures would tend to mean, if anything, that obvious mental defectives and individuals of obviously superior intelligence or social status, would be sent by a judge for a psychiatric examination when charged with an offense such as indecent exposure while the more or less run-of-the-mill individual would tend to be put through the legal machinery without benefit of psychiatry.

An analysis of the educational background of the indecent exposure group shows a fairly even distribution between the twenty-five individuals with an elementary school education or less, and the thirty-one individuals with at least two years of High School. There was only one individual who was a college graduate, and only three individuals who had no schooling at all.

The occupations of individuals in the indecent exposure group are as follows: school boys 5, laborers and odd jobbers 15, skilled artisans 11, service workers such as chauffeurs 11, executives and white collar workers 10, farmers 1, unclassified 7. These figures do not appear to have any special significance except to indicate the wide distribution of social status in the group.

The age distribution is also interesting. The age distribution of other sex offenses shows a preponderance in the twenty to thirty period, and then a falling-off until the period after sixty when there is a rise indicative of arteriosclerotic and senile interest in children leading to impairing morals and carnal abuse charges.

The indecent exposure cases cluster around the early twenties and then show a steady dropping off without any rise in the period after sixty.

The religions of the cases of indecent exposure were Roman Catholic 40, Protestant 18, Hebrew 1, Greek Catholic 1. The Roman Catholic individuals constituted 66% of the whole indecent exposure group, whereas Roman Catholics constituted 53% of all other sex offenses.

The great preponderance of Roman Catholics over Protestants in a community which is not preponderantly Catholic suggests that this item may have significance possibly in connection with the rigidity and severity of family attitudes toward the subject of sex, although admittedly many Protestant groups are very puritanical in their sex attitudes. This is to be evaluated with the frequent finding in the study of rigid, repressive attitudes in the family toward sex and the incorporation of these attitudes by the patient. One of the most constant findings in the entire series of indecent cases where sufficient family history was available was the finding of a puritanical and excessively proper attitude within the family toward the subject of sex. The following typical case illustrates the family attitudes and individual's reaction to the subject of sex that is so frequently encountered in cases of this sort.

A high school boy from New York City drove out into the country, and on a secluded road exposed himself to some high school girls whom he had overtaken. Soon afterwards he was arrested and brought to the Psychiatric Division of Grasslands Hospital for examination. Our report to the Court was as follows:

"In the course of our study of this case we have obtained information from the patient's father and brother. No contact was made with the patient's mother at the request of the father. He states that she has not been informed of the nature of the patient's offense because knowing of it would upset her very much. The patient's father is a mild mannered, soft spoken man, a maintenance engineer in a hotel in New York. The mother, it appears, is high-strung and easily upset. The attitude of the parents on matters of sex seems to be more than ordinarily reticent and proper. In the case of the mother, it is apparently so much so that the other members of the family find it necessary to protect her from a knowledge of the nature of the patient's present difficulty.

The patient is the second oldest child of a family of five children consisting of four boys and a girl. The patient's older brother, aged 21, has been one of our informants. Neither he nor the patient's father seem to be able to conceive of the patient's being guilty of that with which he is charged.

The family is Roman Catholic and of Irish cultural background. Our patient went to Parochial School until the age of 11. He finished elementary school in public school. He then graduated from a technical high school, doing very well in mathematics and science but showing weakness in languages. Since graduating from high school our patient has manifested signs of being sincerely and seriously ambitious to con-

tinue studying. Last summer he took summer courses in advanced mathematics to prepare himself for Cooper Union. After passing the first elimination examination, he failed the second because of failure in English. Following this failure to get into Cooper Union, last fall the patient took night courses at New York University in mathematics and electricity. During the day he worked in the laundry of a hotel sorting laundry. He has done this work right up to the present time. He tells us that he was planning to apply to a Southern University in engineering as well as try for Cooper Union again this fall hoping by that time to have saved enough money to tide him over.

Psychometric examination revealed the patient to have superior intelligence. His rating on the Revised Stanford-Binet was a Mental Age of 17 years, 11 months, and Intelligence Quotient of 119.

On the wards the patient's behavior has been entirely satisfactory. He has mingled well with other patients but has exhibited a certain reticence and unusual quiet politeness for a youngster of his own age.

It has not been easy to discuss sexual matters with the patient. He appears to reflect to a rather unusual degree the attitude of properness and reticence on this subject that we have found to be prevalent in the family attitude. On admission the patient apparently was very troubled and showed great anxiety. Apparently the subject of sex in all its aspects has not been considered a proper subject for discussion in the family. The patient has never had any sexual education nor any opportunity to discuss sexual questions with any member of the family. The older brother probably epitomized the family attitude on the subject by stating in answer to a relevant question that the only source of sex information for members of the family was "from the gutters" with the implication that such is the appropriate place for matters of that sort.

It was our impression that the patient's attitude toward sex is an inhibited, reticent one because of the repressed, excessively proper atmosphere in the family. The patient seems to have reflected a certain shyness toward the opposite sex. The high school which the patient attended was not co-educational, being an all boys high school and with very few women teachers. Such an arrangement did not help the patient any further to acquire ease and facility in his approach to members of the opposite sex. The patient has no girl friends and it seems spends much of his time by himself.

We would consider that the patient has never acquired any social facilities without having the sexual implication obtrude into his consciousness and because of the excessively proper family sex attitudes thus

produce conflict in him and shock him into reticence and shyness in his relations with women. However, with the normal urge to sexual approach persisting, the patient has in the present instance blundered into an awkward and socially unacceptable sexual approach. We would emphasize that in our estimation the patient's behavior which got him into trouble represents the blunderings of an uninitiated youngster rather than implying a perverse trend in him. To put it succinctly, we would say that the patient is the victim of an excessively proper family sex attitude and that his sex attitudes are under developed. We find no evidence of any dangerous aggressive tendencies in the patient.

Physically, the patient is in good health. His blood test for syphilis is negative."

We find that most of the men arrested for indecent exposure are timid, inhibited individuals with exceedingly proper sex attitudes. Frequently the individual is very much attached to his home and to one or another parent, usually the mother, and shows insecurity in his social relations. This data was obtained from the individuals' own statements, from statements made by others about them, and by inference drawn from their past activities.

The evidences of aggressiveness are at a minimum in the indecent exposure group in contrast to the rest of sex offenses. Only five individuals of the entire indecent exposure group show evidences of any aggressive tendencies. Especially looked for were history of sexual braggadocio, fighting, sex play with children, bullying younger children, wife beating, accosting women in street, etc. In these two individuals the indications of aggressiveness were in both cases having the reputation of accosting young women in the street in rather free fashion. No previous sex offenses of any other type existed except in one case, in which that of impairing the morals of a minor was found in the indecent exposure group. In other words, only one of the entire sixty cases of indecent exposure had any record of previous sex offense other than indecent exposure. This case was a 45 year old tailor who had been guilty of sex play with an eleven year old girl ten years previously. On the other hand, twenty-three of the sixty cases had been arrested for or suspected of previous exhibitionistic behavior.

Surprisingly enough, in only fifteen of the sixty cases of indecent exposure, was alcohol in any way involved. In four of these cases the individual indicated that the exhibitionistic activity resulted directly from over-indulgence in alcoholic beverages. These cases may also have

been related to timidity and shyness in the individual when in a state of sobriety.

In conclusion, we may say that sixty cases of indecent exposure out of 165 cases of other sex offenses admitted to the Psychiatric Division of Grasslands Hospital from local courts and the County Court for psychiatric examination and report over a period of ten years 1934-43, were studied and subjected to a statistical analysis. It appears that the number of indecent exposure cases so referred increased markedly in 1937, and though they have decreased since, they have become more numerous proportionately than other sex offenses. Analysis of the cases of indecent exposure reveals that these individuals tend to deny the sexual implications of their activity. They appear to come from rigid and puritanical homes frequently incorporating the very proper and over nice sex attitudes into their own attitudes toward sex and toward their own sexuality. They tend to be shy and timid, and show little evidence of aggressiveness. They show evidence of rather strong super ego formation with the indecent exposure assuming the aspects of compulsive behavior. Their sexual approach is awkward and inept, and is socially unacceptable and appears to be confined to the rather tentative overture of indecent exposure. Rarely do they have a record of any other sex offense. By all evidence, they appear to be a relatively harmless group of sex offenders.

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THE HARVEST*

*Notes and Observations from the Unpublished Autobiographic Book
"The Life of a Psychotherapist"*

WILLIAM STEKEL, M. D.

CHILDHOOD RECOLLECTIONS

It is strange that most people know so little about their own childhood. Even stranger is that parents are blind to the experiences of their children. A person who is blind to his own childhood wears psychic glasses blinding him also to the qualities of his children, especially to those qualities and events he himself has repressed.

The first child seen by the magnifying glass of psycho-analysis was little Hans, whose initial conflicts Freud described in detail as the phobia of a boy of five years. It is wonderful to read how the youngster had to fight his first battle between craving and inhibition, between instinct and morals. Every week his parents took him to Freud and discussed with the master the events and the results of their observations. Thus the boy had what may be called his first psychoanalysis.

Sixteen years later a lad came to Freud and introduced himself with the words, "I am 'little Hans.'" Yesterday I read the story of my childhood. It will interest you to know that I have forgotten everything except one insignificant detail. I have forgotten even that I came every week to see you."

This happens to most people. Therefore, exceptions such as myself, who remember their first experiences clearly should enlighten humanity about the true nature of a child.

* Written in London, a short time before the author's death (1940). The present abstract was edited with the permission of Mrs. Hilda Stekel (London) by Emil A. Gurheil, M. D., New York.

PARENTS AND CHILDREN

What is the most important duty of parents? To make their child apt for life, happy and independent. My parents were equal to the task. Looking back at my long life—I am now seventy-two years old—and asking myself, "If you were born again, what sort of life would you choose?" I can only answer that I should gladly repeat the same life with its sufferings and joys, its disappointments and successes. I should not wish for a different life, because, taking everything into the account, I have always been a happy person. For this reason I believe that I have the right to handle the problems of education, and to advise parents. In doing this I am drawing upon my forty years of experience as a psychotherapist whose task has been to correct the results of faulty education.

I have learned through experience that most neurotics are victims of a wrong education and an unhappy environment. Many of my patients were fruits of unhappy marriages. The well-known saying, "the criminal is the crime of the state," can be changed to "the neurotic is the crime of the family."

The future welfare of mankind is intimately bound up with the prevention of the neurosis. If there were not so many neurotics running about the world, looking for a rationalization of their discontent and emotional cleavage, there would be no war.

HOW I MET FREUD

One day a journalist who was on the staff of a well-known daily came into my surgery. In the course of our conversation he told me that his newspaper was looking for a medical man who could write popular items. The man who did it before had died, and the readers were used to this column. I remembered that I had once written an article *Between Disease and Health*, which had lain in a drawer unused for two years. I gave him the manuscript and after three days I saw myself in print on the first page of the newspaper. It was the custom in Austria to divide the first page into two parts, the upper part mostly for politics, the under part for science and art. This lower part was called the feuilleton. A clever man once made an aphorism: The feuilleton is the contemporary variant of immortality. On this day I felt very proud, but I got infected too, infected with the printer's ink—the contemporary variant of the ancient "writers' itch." (I once had to look through

the galley-proof of a work written by Krafft-Ebing, and he said to me: "Should you ever become infected with the printer's ink, you will never be cured . . .")

I wrote for this paper every week, then for others, got good fees, and became very popular. I had many admirers, who wrote to the papers if they missed me a week asking for my contribution. Some of the articles were published in my books. I received letters from all parts of Austria, some were very amusing. Thus I also came into touch with many prominent literary men.

Among these was a high-spirited physician, Kahane. He had the same fate as myself, he was extremely gifted, and renounced,—I don't know why—the academic career; he worked in an institution where he treated neurotic patients by electricity. He mentioned a name new to me—that of Sigmund Freud, then "Dozent" or assistant professor, lecturing once a week at the university. These lectures Kahane told me were original, packed with new ideas. He informed me that Freud had quoted my paper on *Sex Life in Children*, and had mentioned that he would like to get in touch with me. I shouldn't miss the opportunity, said Kahane.

I have previously referred to my interest in "neuroses," as they were then called. I was very disappointed to find that some cases proved incurable, for neither electricity nor hydrotherapy seemed to do any good. Sometimes, while still unaware of Freud's researches and methods, I had asked such persons about frustrated ambitions, and concerning sex life. It never entered my head, that the "nervous" man does not know where the shoe pinches. I did not know about the unconscious, I did not know that the most important facts buried in the unconscious are revealed by dreams.

I was not interested in dreams. Twice I had incestuous dreams about my mother, and consoled myself with the reflection that Caesar and Alexander the Great had similar dreams. The interpreter explained to Alexander that the mother was a symbol of the earth and that to "sleep with the mother" meant to conquer the earth. Twice I had homosexual dreams, but at that time I had not even an inkling of sexology and did not know that all human beings were bisexual. In a weekly paper I read a long and witty review of Freud's then newly published work, *The Interpretation of Dreams*. The reviewer found the book abstruse and unscientific. I have already mentioned my skepticism about reviews. I decided to call on Freud. He lent me his new book. I was enraptured. I wrote a long paper in two parts in the "Neues

Wiener Tagblatt" and emphasized the importance of this book which was inaugurating a new science of dream interpretation. After the bad review in the weekly papers it was the first appreciation of this outstanding work, which started a new era in psychology and mental healing. Freud was much pleased and dedicated a volume to me, with the words, "With best thanks to my colleague Stekel for his appreciation." The books and my talks with Freud were like sunshine after rain. At last I had learned the right method of curing neurotics. Many obscure cases in my practice ceased to be enigmas. I had a great deal of material, and it was a pleasure to find the lore of the master confirmed by many cases that hitherto I had not been able to understand. The fact that I was a practitioner was my great advantage. I wrote a great number of articles on Freud and was one of the first to recognize the greatness of this genius. Wittels writes in his book *Sigmund Freud*: "The printing machines of Europe sighed under the burden of the papers Stekel wrote on Freud." He was my Christ and I was his apostle. By the "Tagblatt" where I published my "feuilletons," I was once requested to write at least one article where the name of Freud would not be mentioned.

Again fate knocked at my door, this time in the person of the publisher Knepler. He proposed to publish a booklet on appendicitis. At that time there was an excessive dread of this disease. Even normal people were operated on to avoid the danger of appendicitis. I have always believed that there is no superfluous organ in our body, but that we do not understand the purpose or function of them. I wrote my pamphlet, *Appendicitis Without End*. It was a best-seller. The second pamphlet had the title, *The Causes of Nervousness*; it became very popular. I partially accepted the ideas of Freud, but found the cause of neurosis in a psychic conflict. This conflict may be sexual—but it need not be. Here came my first deviation from the theory of the master.

I wrote a series of pamphlets, of which the last one was entitled *Abstinence and Health*. They were translated into various languages.

ANXIETY

My first differences with Freud began after my discovery that anxiety states are curable by psychotherapy. Freud made his great discoveries from the study of hysteria. He believed at that time that anxiety neuroses and phobias are organic diseases, and that therefore they could

not be influenced by psychoanalysis. Fate brought me a patient who proved that even anxiety states may be caused by a psychic conflict, and that these are curable, if you are able to find a solution for the mental cleavage. Let me return to this patient. He was a cashier in a big bank, and had held this position for some time; he could not cross a square. When he tried to do so, he experienced an intense anxiety, his whole body trembled and he had to go to his destination by some roundabout way.

It wasn't even of help if someone went with him. In my practice I had before had several cases of agoraphobia. Like a lightning flash it came to my mind: You must discover a psychic cause for this strange illness. According to Freud's rule, I asked about the patient's sex life and about masturbation; everything was normal. He had never fallen in love. That aroused my suspicion. A man of twenty-seven, and he had never been in love with a girl. There must be some family fixation. I asked about his family, about home conditions, and finally the following facts came out: His very good mother suffered from cholecystitis. The physician recommended her to go to Carlsbad, but the trip would cost too much, and my patient was in financial distress.

I had a flash of intuition.

"Does much money go through your hands?"

"Thousands, and hundreds of thousands of guildens."

"Have you never thought that if you ran away with this money you could save your mother's life?"

The patient blushed and stammered. "The thought has come into my mind. It was immediately rejected. I am an honest man, and have no inclination towards becoming a criminal."

Now I explained to him that in front of the public square he could not cross he was playing with the fancy that he had committed a fraud and had to cross the ocean, and at the same time he proved to himself that it would be impossible. The square was the symbol of the ocean, this side represented Europe, the other side America: his phobia was a means of self-defense against his unconscious criminal impulse.

The cashier asked: "What can I do?"

"Give up your post as cashier."

"How can I do that? How shall I explain that I am giving up a job which is entrusted to men of great integrity?"

"I will give you a certificate to the effect that the responsibility makes you nervous."

"All right" he rejoined.

After a year he sent me his sister for treatment. She told me he had been transferred to another branch of the bank and that his agoraphobia had disappeared.

The second case was a little more dramatic. One morning I was called to a family for the first time. In the room I was led into was a young, voluptuous-looking woman holding the hands of a weakly built man. The man cried, "You see how unhappy I am, I have to be at the office at nine o'clock and my wife keeps me as a prisoner because if I leave her she has a fit of panic. This is the worst fit she has ever had." He told me the story. "The disease started a year ago. First she could not walk alone, someone had to accompany her, mostly a member of her family, later two members of my family, and now I am the only one who can protect her against her panics. Now she has attacks even in the room."

I calmed the lady down, and the husband asked me to come into another room. There he made the striking confession that they had been married for seven years but his wife was still a virgin. Again my intuition helped me. She is protecting herself against temptation. When her cravings for satisfaction increase, it is only her husband who can defend her against the danger of yielding to them. The only treatment would be to cure her husband of impotence. This was finally what I did.

A third case sent to me by Freud revealed the same psychological root.

In his first papers Freud described the anxiety neurosis as a consequence of an abnormal sex behavior. He did not know anything about the psychic substratum of this disease. He believed that the damage done by auto-erotism led to neurasthenia.

I claim it as a merit to have first recognized that this whole branch of neurosis was psychically determined, and that nothing but psychotherapy would relieve or cure it.

I was proud to explain to Freud the psychic trouble underlying these cases. He was astounded, and said: "But such cases are not anxiety neuroses. They are without exception cases of hysteria."

Freud knew that I wanted to report these cases in my book on *Nervous Anxiety*. He asked me to come the next day, and received me with the words, "I give you a royal present, we'll call all cases of this sort anxiety hysteria."

My book finally came out; it had the title "Nervous Anxiety States and their Treatment."⁽¹⁾ For the first time in medicine there was a full description of the organ-speech of the mind; and many supposed organic diseases were explained as psychic disorders. It was a textbook for all psychotherapists. It is perhaps my best book, though it does not contain the latest developments of my discoveries. All my experiences as a practitioner and my first cases as a psychoanalyst were presented there. In a short time it was sold out, and I had to work at an enlarged second edition.

agitated

My book brought me many patients. It became more and more difficult for me to combine general practice and analysis. I consulted Freud, and he promised to support me if I became a specialist. So I made the most important step in my life. I decided to give up general practice and to specialize.

PSYCHOSOMATICS

At that time I had enough private patients, but I could not take all who asked my help because my spare time was reduced to a few hours. However, I accepted two female patients, and was fortunate enough to cure them. One was a well-read emotional and intelligent Hungarian woman who had tried different treatments before. The other was a seventeen-year-old baroness, who had mental symptoms. She suffered from nightmares and morbid fears. When walking in the street, she saw vast numbers of hallucinatory snakes, and had to jump over them. I discovered that her pupils were always enlarged, and finally she admitted that she had put drops of an atropine solution into her eyes in order to enhance their expression. I knew by experience that belladonna was able to produce mental confusion. I remembered that Freud had sent

(1) Liveright Publ., New York. Cases quoted here appeared in that book. Ed.

me among the first cases a travelling salesman, who had fainted one day, and after ten minutes recovered, but had lost his memory. Freud sent me the case as one of psychic amnesia. I had heard that this man was troubled with stomach pains, that there was some suspicion of an ulcer, and that he was given belladonna to relieve the pains. One day I chanced to read in a medical paper that belladonna under circumstances is able to produce amnesia and even a transient mental confusion. I told the family of this man that psychoanalytic treatment would most probably not be necessary, and that the patient would be all right in a short time if he stopped using belladonna. His memory returned after two weeks. I had a similar success with the young baroness, but I had to go on with the analytical treatment because the nightmares and phobias did not cease.

After my return from Hungary, a young officer entreated me to try my luck with his father. He knew a patient I had cured, was told that I had shown great patience, and strongly desired the cure of his father. The patient had been in a sanatorium for seven months following a stroke; he was too weak to walk; sitting in a wheel chair in the garden, or in his bed, he did not talk except the words "I can't." He suffered from a postapoplectic aphasia. Whatever you asked him, the only reaction you got was "I can't." I explained to the son that I had no time to attend to such a case, but he was willing even to pay me for my lost time.

I met an impressive old man with clear-cut features and a long white beard, in a nice sitting room giving on a garden. He answered my greetings by moving his head. I asked him if he was willing to be treated and got the usual reaction "I can't." My experience with the sculptress⁽¹⁾ came into my mind, and I intended to use the same patience. Are there incurable cases? Let us try, anyhow. So I came every day, talked to him in a very kind manner; he looked at me with his big eyes as though he was interested. Except for the stereotyped answer I couldn't get any reaction. After two weeks of this hopeless trial, I said to his son, "Let's finish this fruitless treatment. I am wasting my time and you your money." The son persisted in his idea that

⁽¹⁾ Details about the case will appear in the book, "The Life of a Psychotherapist."
—Ed.

I should go on. He knew that his father's real trouble was psychogenic. He would take the responsibility and never blame me if the treatment was unsuccessful. I tried the same method that I had used in the case of the sculptress. I asked my old patient to stand up and to make some steps in the room with my support. "I can't" was his answer. "But you must," I said to him with a more severe intonation of my voice. Slowly he stood up. He had an imposing figure, and was very tall, so that I only came to the level of his shoulders. He made some steps in his room. Now we progressed every day and finally went into the garden of the sanatorium. The walk was extended to one hour, and he could find his balance without being supported. The miracle happened. He started to talk to me. I was ashamed. The son, a layman, understood the case better than the psychoanalyst. I admired the touching love of the officer for his father.

After a marked improvement had been achieved, the patient left the sanatorium and was brought into an elegant apartment in the best hotel of Vienna. Visitors came and went, and could not understand the change. The old man walked up and down in front of his hotel for a few hours daily. What was the cloven hoof behind the behavior of the son? My patient's affairs had been put under trusteeship; the son asked me to call in Wagner-Jauregg, and we should explain in a certificate that he was now absolutely normal and able to come to legally valid decisions. Wagner-Jauregg arrived, examined the patient for more than an hour, and finally wrote a certificate to the effect that the invalid was not mentally recovered and in full control of his intellectual powers. Next day the officer explained his plans to me. In the last will of his very rich father, he did not get his fair share. He knew my great influence upon his father. I was to suggest to the old gentleman that he should make a new will; he hoped his father would be grateful to the son who was instrumental in his recovery.

Now I found the solution of the riddle. It was not the touching love of a child, it was the cupidity of a would-be heir.

Other members of the family, favored by the last will, seemed to have guessed the intention of the son. They were afraid lest a new will be drawn and implored me to prevent such an unjustified step. They even wanted me to call in new authorities in order to prove that their father was not totally recovered. It was an ugly affair. I stopped the visits to my patient. By accident I got rid of the frequent visits of the son. Some time later he was transferred to front duty and was killed by shrapnel. My patient relapsed more and more into his for-

mer state and was finally taken back to the sanatorium. His speech again became restricted to the words "I can't." Later I understood those words: I was informed that his son had already asked him to make a new will, before he was afflicted by the stroke. Did the emotion induced by the request cause the stroke? I was told that after awhile my patient could speak a few words, but he suffered a new stroke and died some months later.

Was this an exceptional case or are there similar cases? There is only one rule: never lose patience! Some cases demand a great sacrifice of time, and reward the devotion of the physician by unexpected success. Many patients are cured by the fact that some one is interested in their case. Often it is not the method that is responsible for the success, it is the satisfaction of the patient's desire for sympathy, of his longing for interest and companionship. This fact may explain the success of different schools of psychotherapy; it shows that success can never prove a method to be "right."

I had the opportunity to treat a very interesting case of psychogenic strabismus. The patient was a lawyer who suffered from various neurotic symptoms. The outstanding one was his squint; his eyes wandered to right and left, and it was difficult for him to read. He had to study long briefs, to read books, etc., but in spite of his thick glasses he usually had to stop reading after a few minutes. In addition to this, he could not wear stiff collars; he invariably wore his shirt open at the throat, and had the peculiar tic of running his fingers round his collar as though he wanted to have more air for breathing. He was hard-up because he had married against the wish of his rich mother; she did not support him. He worked in a friend's office and earned a small salary; it was difficult for him to make ends meet.

He brought me a dream which he had submitted to different analysts in the hope of getting the right interpretation:

Dream. "I was in a law-court accused of having killed my mother. The lawyer defended me by mentioning the fact that my mother was still alive. There was a long discussion as to whether it was possible for a dead person to be still alive. This discussion went on for hours, and I lost my patience. I looked at the court, at the judges, and said: You may kiss my a—, and left the court."

First the story and then my interpretation. Before his marriage, the patient was a gay Lothario, he passed like a butterfly from one flower to another. A nice, burly fellow, it was not difficult for him to make conquests. But one girl, the most attractive he had ever met, resisted for a long time. He wrote her many love letters and went so far as to promise her marriage. On these terms she gave herself to him before marriage. After a while she became pregnant, and he was compelled to marry her. The girl had kept his letters and he was at her mercy. It was during the war and he had to go as an officer to France. He married her without his mother's knowledge and went to France. There he stayed two years. Though he was a passionate man, he was absolutely continent; being extremely jealous, he was afraid of retaliation in kind. He came home to America the father of a nice little girl. Though he was very passionate, his marriage turned out to be a very unhappy one, because of his morbid jealousy. To walk in the street with his wife was an ordeal for both. She was not allowed to look to the right or to the left, and any man who greeted her was suspected of being a secret lover. The home turned into hell; quarrels and reproaches were followed by reconciliation, and—usually—by a passionate act of intercourse. I asked the patient for the associations to the dream. The only association he could produce was the fact that the lawyer in the dream was the same who had once defended a man who had killed his wife with a hatchet. The man was later hanged for this crime.

I explained the dream to him as follows: "You haven't killed your mother, but you have killed your love for your mother, and her love for you. Your relationship with your mother is finished. Besides which you have criminal impulses to kill your wife, and to become reconciled with your mother, but you are afraid of being hanged for the crime. That is why you cannot wear a stiff collar, and the way you play with your collar comes from the feeling that you already have the rope round your neck."

"And what about my eye trouble?"

"There are various reasons for that. First, you are mentally blind to your problems. You do not want to see the truth; you do not want to know what is going on in your mind. The most important fact is that you have forbidden your wife to look to the right or to the left in the street. If you are walking in the street you are determined to look straight ahead, and do not want to see the nice girls passing right and left. (At that time it was the fashion to wear very short skirts, and girls freely exposed more or less pretty calves). Against your conscious

will your eyes are swerving to the right and to the left, so that you can—unwillingly—see the girls around you. This behavior is in keeping with your polygamous nature and your past as a Don Juan, while all the time you are pretending (to yourself) that you are looking straight ahead.”

The effect of this interpretation was remarkable. The patient came to the next session wearing a stiff collar and without his thick glasses. He could read as long as he wished to, and felt like a new-born man. (The consequence of this success was that a great many near-sighted and far-sighted people came to me during the next few weeks, believing that I am an exceptionally able ophthalmologist.)

In many diseases you will find a mixture of psychic and organic factors. One of my patients had a spell of depression. I visited him in his boarding house. He was so weak that he could not get up. He looked suffering, pale, and I was told that during the whole day he had taken no other food than a cup of tea without sugar. At this moment I suspected that he was suffering from hypoglycemia. I remembered that he was very fond of sweets, always had some chocolates in his pocket and used to eat them at intervals even during the analysis. I ordered a test to determine the amount of sugar in his blood. The sugar tolerance test confirmed my supposition. I asked the patient to drink a strong solution of sugar, in a short time he was a different being: his cheeks grew rosy, his pulse calmed down, he felt strong again and left the bed a new man.

I have very often observed that some patients use tricks to increase their psychic troubles. A man who suffered from anxiety states when he had to cross the streets, sighed, breathed deeply and frequently, and swallowed air. The distended stomach pressed on the diaphragm, the diaphragm pressed on the heart; the attacks of palpitation were partly due to excitement, partly to aerophagia. Here we have a vicious circle, in which one symptom increases the other.

THE QUINCKE' EDEMA

What is science? It is the recognition of a new truth, not the de-

fense of an ancient dogma. In this connection, let me recount a most instructive episode.

I once treated a case of Quincke's disease, (angio-neurotic edema). The patient was a lady, aged forty, who suffered at intervals from extremely disfiguring attacks of edematous urticaria of the face and hands. For seven years she had been ineffectually treated at various clinics. One of her doctors recognized that the malady was psychogenic, and for that reason had sent her to me. I handed her over to my Dutch pupil Lingbeck, who discovered the following facts: The patient, a married woman with a grown-up daughter, did not secure adequate sexual gratification in the intercourse with her husband, but did so in association with a lover. The attacks of angio-neurotic edema always came on after a visit to the lover, and were obviously a self-inflicted punishment for infidelity. (Fear lest the daughter might learn of the mother's misconduct was also a part-cause). We advised her to discontinue the extramarital relations. She did so, and the attacks of Quincke's disease ceased.

At my instance, Dr. Lingbeck brought the case to the notice of the Medical Society. Its interest lay in the fact that it invalidated Freud's opinion that an adequate sexual gratification is a cure for neurotic disorders. Here the neurotic symptoms followed adequate sexual gratification, but ceased when the gratification was renounced. When this had been explained, one of the doctors voiced his objection: the case presentation was not suitable for the Medical Society. The results had been due to chance, and had nothing to do with science. This declaration was vociferously applauded.

I intervened, and said that time would show whether Lingbeck's inference and mine had or had not been "scientific."

The patient was seated in the ante-room listening to the rather heated discussion. Her natural reaction was: "These experts do not believe that my malady was caused by my love affair. Why, then, should I deprive myself?" That very day she phoned to her lover; they made an appointment, and she enjoyed herself in the old way. But within a few hours she had a distressing attack of Quincke edema, and came ruefully to consult Lingbeck. He and I were able to convince her that the illness was a conscience reaction. Now she permanently broke off the liaison, and was permanently cured. As to the last statement, I was reassured when I again saw her several years afterwards.

EPILEPSY

Meanwhile I had made a discovery of great importance. I treated cases of epilepsy, was often surprisingly successful, and I learned by experience that many cases of so-called epilepsy were mentally conditioned, or were complicated by a psychic super-structure. In many cases you may improve the condition of patients, in some you may cure them completely. My desire was to drag the patient out of his isolation and idleness, to induce him to work, and even if he continued to have fits, they were, in any case, diminished in number: I was able to make him a useful member of society.

After the publication of my paper on epilepsy, I was sent an issue of a journal, "Der Wendepunkt" ("The Turning Point") edited by the Swiss physician, Dr. Bircher-Benner, a pioneer in dietetics. The leading article in this issue called "A great Triumph in Science" gave a summary of my research on epilepsy. I was pleased because it was the only affirmative voice among views that were otherwise invariably unfavorable. Clinicians treated me as a "fantastic mind," and were far from acknowledging that I worked hard to bring light into a dark problem of medicine. Like a lioness defending her cub, so the psychiatrists defended epilepsy as an incurable organic disease.

(Bircher-Benner was enthusiastic about the fact that in my psychic treatment the use of narcotics was debarred. I found that they reduce the activity of the patient and bring about regression into day-dreaming. The epileptic finally becomes a drug-addict.)

I once treated a patient suffering from what was described as "genuine epilepsy." Surgical operation had been fruitlessly tried, but psychotherapy was successful. Did this "prove" anything? No, for doctors insisted that if the patient was cured the diagnosis of "genuine epilepsy" must have been wrong. My view that some cases of "genuine epilepsy" are psychogenic was arbitrarily dismissed as "unscientific."

COMPULSION AND DOUBT

Freud had already described the "family romance." In his youth everybody builds the fantasy that he is the offspring of a prominent person, higher than his father. Many myths confirm this infantile fiction. I could not agree with Ernest Jones, who wrote a pamphlet on Hamlet and found the origin of his doubt to be a result of his Oedipus

complex. Hamlet's behavior is explained by Jones as the result of a fixation to his mother. I considered Hamlet's doubt to be a doubt as to his paternity. Had the liaison of Claudius and his mother started before he was born? In that case the killing of Claudius would be parricide. It was impossible for him to follow the orders of his father's ghost because internally he doubted whether this ghost *was* his father. In the play Claudius addresses him always as "my son" and never as "my nephew."

In one of my lectures I mooted a new problem, the patient's choice of a neurosis. Why is it that hysteria, in former times called "a *maladie du siècle*" has disappeared in Europe since the close of the nineteenth century, whereas compulsion neuroses have grown much more frequent? I explained this phenomenon by the fact that these diseases had a different psychic background. Hysteria was a consequence of repressed sexuality. The modern era of free sex life had made this repression superfluous to a great extent. Fathers and mothers feel that their children have the right to love, and that gratification of the sexual impulse is one of the necessities of life. In contradistinction to hysteria, I found in all cases of compulsion neurosis that there the authority complex had been shattered by the peculiarities of the sex life of the parents. Either the mother had her affairs or the father was a Don Juan. The consequences could not be so dangerous if the children were not educated in accordance with an obsolete moral code. They turn this code against their parents. I called this phenomenon the neurotic's double standard of morals. I have not seen a single case of compulsion disease in which the authority complex had not been shattered. I described in detail the psychology of this disease in my book "Zwang und Zweifel" (Compulsion and Doubt).⁽¹⁾

PATIENTS

At the start of my medical career I imagined that poor people who are treated free of charge are very grateful. Later I discovered that

⁽¹⁾ This book is in the process of being translated into English. —Ed.

these patients are all dominated by the idea, that they would be treated in a better manner if they could pay. Later in my ambulatorium, even poor patients had to pay according to their means, for instance, some times as little as twenty groschen,⁽¹⁾ for then the treatment was more successful.

On the ingratitude of patients I could fill large volumes. Studying this question, I came to the conclusion that ingratitude is a human quality. There is nothing more difficult to bear than obligation towards a feeling of gratitude. "Ingratitude is the independence of the soul," is a French proverb. They are right. Grateful patients are a moving exception.

WAR PSYCHIATRY

During the first World War I worked in the neuro-psychiatric section of a large war hospital in Vienna. It was built for three thousand patients. My department had two barracks with a hundred and forty patients all told; besides this, I was busy with consultations from other departments. By a strange coincidence Alfred Adler was my predecessor. He had been transferred to a provincial town, although he had done excellent work here. His examinations were profound, his histories of the diseases were blameless, he was a model physician.

I did not know that I got this responsible position only on trial. The first cases with my statements and diagnoses were sent, without my knowledge, to be looked over by some prominent men. I had good luck. I was very cautious. Every new patient had to undergo a thorough examination. My first three cases were very interesting, I had to decide between a dangerous organic disease and malingering; my first statements were confirmed; in a short time I enjoyed the confidence of all my colleagues and later I was given the right of independent decision; all my decisions were accepted without further supervision.

I sympathized with the poor soldiers, and tried to protect them as much as possible. This became known among them and they felt con-

(1) About five cents in American currency. —Ed.

fidant of my good will. Even "scrimshankers" confessed. I despised those physicians who were slaves of the war mongers and forced half-recovered soldiers to go back to the trenches. I have seen terrible examples of the work of these executioners; convalescents wounded in the war, still in pain, with their wounds not healed, were sent back to their regiments. In many hospitals they were tortured by a faradic brush, so that they preferred the terrors of war to the terrors of the hospital. Every week the chief of the hospital, a major, a former dentist, and a favorite of the almighty head-nurse, came into the ward and shouted "You must evacuate! Evacuate! Send fifty percent of the patients away! A new transport is coming!" At the same time disgraceful favoritism existed in the hospital. The chief, the head-nurse, and two sergeants formed a corrupt clique. Rich patients loafed around for months and months. In order to keep them longer in the hospital, they were classified as suffering from non-existent diseases. I had to fight to protect the soldiers against undue cruelty. The whole corruption was covered with a superficial varnish of hypocritical religion: every Sunday all the physicians had to go to mass. It was the wish of the almighty pious head-nurse. In the first row sat the Major in his best attire.

Some cases I would have liked to analyze. There were so many shell-shocked persons, hysterics, tremblers, dancers, the paralyzed, those affected with dumbness, etc. It was as if a sorcerer had transferred me back to the time when I studied with Krafft-Ebing. Again I was confirmed in my opinion that Freud was wrong in his statement that all neuroses are caused by the repression of sex. Any generalization is dangerous. I am convinced that all cases of shell-shock and war hysteria are caused by a psychic conflict; on the one side it is fear of death and disablement, on the other the duty towards the country. =

In our hospital, because of lack of time, any mental treatment other than hypnosis was impossible. So I started to hypnotize my patients and achieved good results. In my barracks an atmosphere gradually developed that was favorable to hypnosis. These simple people believed I was working with magic. As is known, it is difficult to hypnotize individual neurotics in the office, but it is easy to hypnotize a group of people simultaneously. One is impressed by the example of the other. Therefore, men working with hypnosis often have several partic-

ularly submissive patients on whom they perform their miracles before starting with the new patients. Public hypnotizers generally have one or two bogus "mediums" (assistants), to implant the suggestion upon others.

THE CONGRESS ON PSYCHOTHERAPY

Meanwhile in Europe the interest in psychotherapy was growing. A German Society of Psychotherapy was founded, trying to unite the different schools. The first congress met, attended by hundreds of psychotherapists and by representatives of the official psychiatric school. I was invited to speak about the training of the psychotherapist.

But the hope that the differences between the various methods could be bridged over, and the different parts could be amalgamated remained unfulfilled.

At the congress every speaker emphasized the importance of his method, and the same melody was repeated like a tune on a hand organ, with slight variations. Can a conservative convince a socialist, or a Catholic a Protestant? Psychotherapy was for many members like a religion, and opinions not fitting into a specific theory were excluded. How was I to speak about the training of a psychotherapist when there were so many schools of psychotherapy, each regarding the other schools with contempt? I started my lecture, first speaking on the psychology of congresses. You can observe men sitting on a bench and memorizing their lecture while impatiently awaiting their turn to speak; like hens they lay their eggs, then look at the time table for the next train home. It is typical of all congresses that there is no exchange of ideas. It only appears as if one could influence the others.

✓ I am sorry to say: there is no training that is suitable for everyone. Either you are born a psychologist, or you will never become one. I have a right to judge this because I have often had the opportunity of analyzing consulting psychologists. I am sorry to say that many of the psychotherapists themselves are the worst neurotics.

What ground is there for the usual contention that no one should become a psychoanalyst without having undergone an analysis? No doubt a perfectly normal man (or woman), one with a perfect mental

balance, could become an analyst without having been analyzed. But normality, in this sense, is beyond question, rare. During the Great War of 1914-1918 it soon became plain that, as the result of the unwonted stresses it imposed, many persons who had regarded themselves, and been regarded by others, as perfectly normal, were liable to hysterical troubles which it became the fashion to speak of as "shell shock." A predisposition to what the Freudians call "neurosis" and to what I term "parapathy" slumbers in us all. I have often accepted pupils who declared themselves thoroughly normal, and said they only needed analysis as the easiest way of mastering the technique. What interested me was that among these professedly normal persons I encountered some of the worst parapaths I have ever met. Having had occasion to analyze other psychoanalysts (some of them persons of considerable note), I have been interested to find that the same remark applies to a large proportion of them. I shall never forget the case of one analyst who consulted me for the relief of agoraphobia. He could not leave his dwelling unless he had a companion with him. Yet he had treated other agoraphobiacs, and believed himself to have cured them.

This brings me to the core of the problem. I have discovered what I call the "analytical scotoma," this meaning that the analyst is blind to all such complexes in the analysand as he himself is subject to. For instance, if the analyst has a fixation upon his sister, he will be inclined to overlook this complex in his patients. We may say that if the analyst is himself "neurotic," he must certainly be analyzed. Perhaps many of Freud's and Adler's peculiarities, (and, for that matter, Stekel's peculiarities likewise) are to be explained by the fact that we have never been analyzed, and by the fact that auto-analysis is impossible.

Consequently, there is good ground for saying that every psychoanalyst ought to be analyzed. The analyst should be free from complexes. Were that possible, even then analyses would not be hundred-percent successful, for the analysand's complexes cannot always be overcome. There is also a phenomenon known as "secondary repression" to be reckoned with. The analysand recognizes a truth, appears to accept it, but has really repressed it into the lower levels of the ego.

In this connection I must point out that a good many "fee-snatchers" take up analysis as a profession. Many a man or woman becomes an analyst after having been analyzed for his or her own parapathy, and thus having discovered an interest in psychoanalysis. In a discussion wherein I alluded to this, someone remarked, "Set a thief to catch a thief." But this does not really apply to psychoanalysis. What we need

are persons with a good mental balance and high moral standards. Psychoanalysis is in great measure a process of moral re-education; and such a moral re-education can only be effected by a morally firm person.

// We need more healthy, better poised physicians for this vocation. If every psychoanalysis restored the analysand to perfect health, you could suppose that the analyzed physicians would be absolutely healthy, and therefore justified in analyzing other neurotics. That is not so, however. Many remain neurotics. Many neurotics are only partially cured, and cling to a part of their neurosis. The contention that every psychotherapist must be analyzed to be good, is, however, unsound. Freud, Adler, Jung and Stekel were never analyzed. Who would doubt their ability for psychotherapy? There are a great many good psychotherapists who use, in an eclectic way the teachings of different schools. Every psychotherapist is an individual being, and his method must be in harmony with his personality.

PERSONAL NOTES

Every practitioner has days in which he has much time to spare. I used this free time to visit the different museums in Vienna. I did more; I spent a whole holiday in Vienna as a foreigner, and used a guide to see all the curiosities. It is remarkable that in the town where you are working you never have the time for the things that are worthwhile to see. You delay fulfillment, and little errands fill the gaps of the empty time. Possibilities destroy reality. I went into all the little galleries and in one I was asked to write my name in the visitor's book. The official looked at the book, saw that I was from Vienna, and laughed. "I haven't seen a visitor from Vienna in my gallery for two years."

I had not the slightest idea of architecture, but with my guide book I studied the different details of palaces; I could visit the wonderful old Viennese courts, hidden in some remote corner where no one knows that they exist.

My love of nature was so strong that at the start of my profession as a psychoanalyst I divided my work into two parts. Seven months of the year I worked in Vienna, and five months in Ischl, the beautiful

place where the Emperor had his summer home. I got to love that place and its quiet, almost deserted walks. A great many of my patients were foreigners and they enjoyed this quaint place much more than the hot city of Vienna. At the end of April I went to Ischl, where I took a comfortable bungalow with a pretty garden. I worked in the garden for the most part. It is a prejudice to believe that the patient must always lie on the couch and the analyst sit behind him like a hidden god. I had very good results with patients I treated in the open air.

My sixtieth birthday was celebrated by my pupils who arranged a splendid banquet. They also gave me a medallion made by an artist, and a large book filled with messages of congratulations and appreciations received from all parts of the world. I availed myself of the opportunity of this banquet to make a retrospective speech. "Often, I said, I have been asked 'how did you find time to write all those books?' I always had the necessary time. I related an incident in which my son Eric was involved. I had composed a new song and had asked him to correct my mistakes because I had never studied harmony and counterpoint. After a week I asked him, 'have you gone over my song?'"

"Father! Please do not be angry, I couldn't get a free hour."

"You see, my son, that is the difference between you and me. I have always had this free hour."

The peculiar atmosphere of my house made an ever-memorable impression upon all who came to visit us. It was a fairly old building which had once belonged to a man of some standing, and who had been Empress Maria Theresa's physician. It was furnished throughout in the appropriate style. My passion for paintings had also been helpful in its decoration. I had diligently visited the most noted picture dealers in search of suitable subjects. When I found one, I took delight in having the picture cleaned, touched up and revarnished. This was akin to psychoanalysis which has now become my professional occupation; for here, likewise, I had to clean, touch up, and revarnish, so that the personality was restored. Let me mention, in this connection, that Freud, too, had a passion for antiquities. His writing table was adorned

with Etruscan and Phoenician vases. Nothing pleased him more than to be given such a relic from excavations. He was as much interested in the past of our race as in the early experiences of an individual.

EPILOGUE

Here in Tonbridge, in a quiet place, being temporarily without other occupation, I have written this book. My days are spent in composing my autobiography, in weeding the garden, in reading, and sometimes in playing the piano.

If I had the power to re-live my life, I should not ask for a different one. I attained a greater measure of success than I had dreamed of; I have been blessed by love and recognition, and by better health than the average man can boast, while my joy of life has been a good companion whatever my situation. I have learned to adapt myself to reality and not to ask for the impossible.

My work in London seems to me like the wish fulfillment in a dream. Sometimes I feel as if I could be grateful to Hitler! I was once invited as a guest of honor to a dinner given by the Royal Astronomic Society Club. I was greeted by the chairman and was asked to make a speech. Voices called out, "Speak about Hitler" other voices, "Speak about miracles." So in my speech I explained that it was as difficult to speak about Hitler as about miracles to an astronomical society which does not believe in miracles. If a year ago any one in Vienna had told me, "You will make a speech before the Royal Astronomic Society Club," I would have answered, "Only a miracle would produce it." Hitler worked this miracle.

// I had just finished this book when I got the news of Freud's death. In my writings I have pictured the pettiness and the foibles of one of the greatest geniuses of our time, and shown how they influenced him in relation to myself; but the last thing I want is to produce the impression that I intended to belittle the greatness or deny the merits of this singular personality. Nobody would doubt the greatness of Wagner

because his character shows mean, many almost contemptible features. His relations to Meyerbeer disclosed him first as a flatterer and admirer, later he attacked Meyerbeer in an article entitled "Judaism in Music;" but who would deny that Wagner in his music reached an almost incredible height? His operas are written for eternity, fill thousands and more thousands of hearts with enthusiasm and lift them out of everyday life.

I told myself that Freud's integral character had only one goal, to serve the truth, his truth. It was the work of fate that I could not see my truth through the same glasses. Posterity will decide the importance of Freud. He started a new era in psychology by destroying the old idols of academic science. Innumerable "neurotics" thanked him for guiding them to health. I have every reason for being grateful to him. In spite of all our differences I am dominated by a profound sense of gratitude. I am thankful to fate that I came into touch with this giant. What direction would my life have taken if Kahane had not said, "Come and see Freud?"

I remember that one summer Freud, Adler and myself had our lodgings in the same neighborhood. Is it an accident that Adler and Freud are buried in English soil, that here, likewise, will probably be my last resting place? Is it not more than a symbol that the leaders of a new science have found in England understanding and refuge? The new psychology driven out from the land of its origin has found in free England protection and understanding and a home. Does it mean that England will maintain the leadership in the freedom of science?

While I write, the war rages, guns are roaring, innocent people are killed by bombs; ships are sunk that were freighted with food for those who are fighting Nazi Germany. The fate of mankind was never decided by wars. Thoughts are stronger than guns. We thank Rousseau and Voltaire for the French Revolution, which, in spite of unpardonable cruelty, hoisted the flag of freedom and human dignity. Who knows whether Freud has not inaugurated a similar revolution, and that her ferments will leaven a new world?

The fact that after the rape of Austria he had to leave the land of his birth will one day be regarded as one of the blackest crimes of the Nazis. I can imagine, nay more, it is my conviction, that in days to come his coffin will be brought in triumph to Vienna, and that an im-

mense crowd of mourners will pay him the honor that was denied him during the reign of the "master race." Ideals cannot be destroyed by political movements. Our work will last longer than this epidemic of hatred.

Tranquilly I look forward to my own demise. I have done my utmost to turn life to account, and life has given me all that any mortal can expect. My biography is in substance "my last will and testament."

In the charming book, *A Greek Garland*, translated by my friend, F. L. Lucas, the well-known poet, I have found the following verses of Philodemus. Lucas gave them the title, "Years of Discretion." May these beautiful verses finish my book:

"I have loved, but then who has not? Frolicked—who has not tasted
Such frolicks once? Done follies—'tis a god who makes us fools.
Enough! Fast round my temples the dark hair dwindles, wasted
By silver threads, foretelling the years when folly cools.
We played while it was playtime. Now that the season brings
Farewell to that, we'll turn us to think of wiser things."

CRIMINAL CONVERSION—

A Neglected Phenomenon

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There is a special destiny that shapes our ends, rough hew them as we may.

The concept of criminal conversion embodies the separate meanings of religious conversion and hysterical conversion. In theology, the convert changes his emphasis from himself towards God, often suddenly and dramatically. The hardened sinner who hits the saw-dust path to the exhortations of the Evangelist, proclaiming he sees the light and repenting the errors of his ways, at times much to his own surprise, is the classical example.

This change from indifference to complete repentance, which often is not only genuine, but long-lasting, is not a common experience, but occurs often enough to make one wonder about its dynamics. In psychology, the term conversion implies the release of an unconscious pathological idea into the form of an hysterical manifestation. Again, this change is often dramatic and takes the converted one by surprise.

Criminal conversion is here defined as the dramatic apparently acausal change of a non-criminalistic individual into a determined, full-blown criminal. Criminal conversion is characterized by tenacity of purpose, lack of profit to the criminal, aggression toward symbolic enemies, and inevitable capture and surrender. We exclude by definition the insane, those with morbid propensities towards crime which are not sudden changes, those who feel they are forced to commit a criminal act as the lesser of two evils, a la Jean Valjean, the professional criminals, and the accidental criminals. The criminal convert is one who has an unconscious desire to commit a crime which will hurt him and harm some individual or institution, and who then wants to receive punishment.

Before proceeding to the analysis of the mechanism behind such phenomena we will review a well-known case of such criminal conversion, found in Alexander & Staub's "Criminal, The Judge and the Public."⁽¹⁾ In this case, a German physician was appointed chief of a gynecological clinic in which field he was a brilliant worker. Immediately on hearing of his appointment he went to a local book store, took some medical books and attempted to sell them to another book store.

At the second store he was questioned and readily broke down, admitting he had stolen the books and asked to be arrested. He was well-known to both book-stores, and the proprietor not only refused to have Herr Professor arrested but offered him the books gratis!

The next day he went to a different city in which he was not known and did the exact same thing, and was finally arrested. After confessing besides that he had stolen some optical parts from a museum and also claiming he was not legally a physician, he fought attempts to release him or defend him. He was sentenced and began to serve his term in evident self-content.

Before analyzing this and some other causes we may well spend some time considering the nature of what we call "Change." There are, of course, two separate ways of looking at "Change." Real change refers to objective regroupings of atoms or realignment of forces. Apparent change is that which is seen by the observer. Real change precedes apparent change and often has been going on for some time before apparent change emerges. An excellent analogy can be taken from chemistry.

A beaker of clear liquid is increased by the addition of another clear liquid. The watery solution stands. A minute goes by, another—then suddenly—instantaneously from top to bottom, the solution turns a startling deep red. While to the observer an immediate dramatic change occurred, actually, the two solutions had been interacting all the time, the whole solution approaching gradually the point where the chemical balance from colorless liquid to red liquid was passed. This analogy represents rather well the process of criminal conversion. The individual to all appearances is a normal individual, pursuing his ends in a perfectly natural way. Then, suddenly—instantaneously—he commits a definite crime in a particularly cold-blooded dispassionate manner, and lo,—to all intents and purposes he is a confirmed criminal.

The phenomenon of change has not been adequately explained. A number of theories and aspects have been proposed, applicable to the physical world. Leonardo da Vinci for example, declared that nature always makes changes in the quickest and most direct manner. Heraclitus declared that continued change was the law of nature. Maupertius was the earliest to declare that changes occurred in terms of minimal energy and time expenditures and followed the law of parsimony, to be re-announced in different forms by William of Occam and by Lloyd Morgan in his famous canon.

If we generalize from these principles we discover that psychological change is continual and that it proceeds in an orderly fashion. However, while a change of scenery is going on behind the curtain, the observer who sees only the curtain is not aware of the reality and the extent of the change, being baffled by the flimsy rag. When the curtain goes up, when the point of balance is passed, when the slight shove unbalances the mighty boulder, or when the specific alembic begins to transform the surface film, the reality which was always there, appears dramatically and inexplicably. The observer declares the apparent change, that which he has seen, to be the real change, unaware that the collapse had been proceeding, in the cases of personality, for years. Thus the parents are dismayed when their daughter flatly states they are poisoning her, the wife is stricken when the husband commits suicide, the family is horrified when the respected father assaults a child, the evident change being, to them, fantastic, acausal and inexplicable. That which had been going on all the time was not evident: perhaps it would have been to a mental therapist but not to an untrained observer.

And yet, criminal conversion is not a Jekyll-Hyde, or multiple personality change as Morton Prince might have it. It is very much the same individual who strips his conventional mask to reveal the reality behind. We must not feel that either the prior aspect or the normal aspect is the real one, but rather that the aspect which predominates is the true one. In a manner of speaking, throughout life we are changing and taking one mask after another, but when for some reason we keep one mask on too long, we allow pressure to be built up, and the unconscious forces form a back-log which due to the pent up frustration explode in a mighty aggressive act.

Man is a summation of the forces that play on him. He is a complex moment of the addend of changes and new emergents are logically and inevitably determined. The individual is more or less the helpless instrument of the fates and his feeling that he is captain of his destiny or master of his soul is nothing but a sorry joke. Perhaps he can effect macroscopic changes volitionally, but his volition itself is changed microscopically by forces behind his knowledge or control. It is the eternal paradox of man unable to decide whether he can decide.

Coming back to the converted criminal we have therefore before the overt criminal act a chain of forces inevitably leading him to release long uniquely logical actions without his knowledge and beyond his control. While he has not yet committed a crime, nevertheless he is a real criminal long before the act and is merely awaiting a catalyst

or, as in the chemical experiment, the progressive point between covert and overt change; when this moment arises, the reaction is swift and certain. The honest law-abiding man commits a criminal act. To the individual and to the unsophisticated observer the act is acausal and most illogical, yet as has been explained it was necessary and nothing else could be expected. Even though not a stray thought of a criminal act entered the mind of the person, actually he was a criminal of long standing.

Let us return to our illustrative case. The physician who stole, did so obviously from deep neurotic impulses. But also, he *demand*ed imprisonment. The most obvious reason is that he wanted to be punished. Alexander and Staub discovered that the physician's motives had been impure in going into gynecology, the adult residue of the Oedipus complex. But if we may penetrate a little deeper and expand our probe: Why steal medical books? Why steal optical parts? Why state he was actually not a physician.

The answer is not only did he want to punish himself but also the medical profession by trying to bring it into disrepute. He could have denounced medicine and entered a different field. He could have killed himself, stolen money or run away. That would not have satisfied the conditions within him. He wanted punishment and disgrace not only on himself but on the profession which had permitted him to realize his impure unconscious motives. Perhaps also, he wanted to punish his mother.

The criminal convert wishes to re-establish a complex balance, to kill a number of birds with one stone. He is not a simple individual with a unitary drive, he is almost always a very complex individual with a large number of pressures or unfilled needs that need to be satisfied, and so he does not only commit a crime in order to punish himself, but a particular type of crime against certain people, involving definite actions, at a definite time, in a particular manner. The criminal act has a peculiar logic not explainable except when the sick man's motivation is understood, but every strange element has its symbolic reason. It is an elaborate ritual, indeed, that the neurotic, frustrated, mal-adjusted performs, to seek psychic release.

If we follow the mode of typifying such syndromes by naming them after characters from literature, we may well call criminal conversion the *Samson Complex*. Samson was truly a maladjusted individual. He married a Philistine woman who tricked him by betraying his riddle; later, her father denied him entrance to her. He, for re-

venge, burned the fields of the Philistines by tying firebrands to the tails of three hundred foxes, and his wife and her father were later burned in vengeance by the Philistines. We also know that Samson consorted with prostitutes and that later Delilah betrayed the secret of his strength and as a consequence he was captured and imprisoned. Finally, however, while the Philistines sported at his helplessness, he pulled down the pillars of the prison house destroying himself and his enemies. This is exactly what the neurotic criminal does, he symbolically destroys himself and his enemies.

The converted criminal acts symbolically against his best interests to punish himself and others he views unconsciously as his enemies. This phenomenon is very closely related to the one expounded so brilliantly by Menninger⁽²⁾ where he showed that man-against-himself contrives, often in the most ingenious fashion to maim and to annihilate himself while ostensibly acting in his best interests. However, while man-against-himself conspires along relatively direct and simple lines, criminal-against-himself-and-society is a more complex individual and not only conspires against himself, but is also able to do so in accordance with his pathological logic, harmonizing diverse forces. Thus, the physician wanted punishment in order to obtain release of his guilt feelings; he wanted to punish his mother who had been the innocent instigator of his impure desires; he wanted to punish the medical profession which had permitted him to gratify his illegitimate wants; and by stealing medical books and supplies he punished medicine itself, symbolically. With one stone he killed a number of birds.

The honest man who is converted over-night into a criminal is a neurotic individual who transfers his maladjustment to the world in a criminotic manner. He has not been able to solve his problems, but has been accreting to them until he finally obtains release by an excess of revenge. How common are such cases? Probably more prevalent than most workers in the field would believe; perhaps the majority of our felons. Insight is necessarily lacking, for if it existed, there would be no converted criminals. Insight would dissipate the momentum of the forces; however as has been mentioned by various prison therapists,⁽²⁾ psychiatric assistance is usually resisted. The sick man does not want to be cured. But serving one's term does not guarantee the completeness of the expiation. In such cases, the converted neurotic criminal, while going out with the best intentions of doing well and of adjusting to his environment is nevertheless like the prisoner of Chilon eager to come back to his chains. And by means of a new crime or by way

of violation of parole he returns. Often he goes out ready-primed to get himself additional punishment. Every prison worker knows full well the disillusionment of seeing a prisoner leave an institution with the most excellent prognosis and then return for another crime. The common recidivist who "never learns a lesson" may be a criminal convert who has not received enough self-punishment. What seems extreme stupidity may be only the desire to do further penance.

It may be well to sketch out several illustrative cases which the average criminologist can add to. This first case is valuable because it illustrates very well the phenomenon of the moment of decision.

As a child Max was brought up in a very exclusive neighborhood. The depression of '29 stripped his family and broke the father's spirit. The family moved to another neighborhood, much less exclusive, in the same locality; and Max went to the same school and played with his old crowd. As he grew older, while his friends went to college, he went to work; but still associated on terms of evident equality with the old crowd. Although they were all in a superior financial position, he was accepted completely. He began to keep company with one of the girls. He was twenty-two at the time of his criminal decision. One night he squired his girl to a Broadway movie and on the subway train, they met by pure chance an aunt of his. While chatting, the aunt suddenly remarked: "Max has responsibilities to his family, you know." The girl answered, "I am not tying him down." His reaction was to decide right then and there as though it were the most natural and inevitable thing to do, to become a thief. Which he did. He left home without advising anyone and was soon caught in a bungling burglary and sent to a reformatory. In a later interview he stated that while his decision had seemed natural at the time, later, on reflection, it seemed absurd and insane. He could not understand why he had made this serious and tragic decision in such an offhand but determined manner.

In a second case an individual married a girl despite his family's warning that the girl was no good. They were right for his wife was soon openly unfaithful to him. They broke up eventually, and he began to live with a prostitute, then finally reconciled himself with his family. All this time strangely enough, he maintained a very responsible position where he handled large sums of money.

The day he moved back to his parents' home, his mother said something to which he took objection. She threw a cup at him in a fit of anger. He arose and went to the office which was closed. There he stole a paycheck of one of his fellow employees, signed the other's name

to it, endorsed it and cashed it in the store of a personal friend. He then ran away, but was eventually caught due to his own stupidity. It is an interesting thing to note that the check was for sixty-five dollars, and that there were thousands of dollars in an office safe to which he had access.

Following release he committed another forgery and was again returned to prison after leaving an obvious trail, in fact telling the person he defrauded exactly where he was going.

The last case involves a man who for years had difficulty adjusting to his wife who was of a different religious faith. They finally separated after many quarrels and he went to live in a furnished room. One day he broke into a room of this rooming house, rented by a policeman, stole a pistol, held up two stores, stole a taxicab, smashed it and found himself the next day on a boat headed for another city. When the boat landed he gave himself up and was sent to prison.

While these cases are fragmentary it is evident that the following characteristics existed in each case:

1. The criminal acts were non-sequiturs in terms of the individual's overt life-style.
2. They were not "necessary." They did not result from obvious socio-economic drives.
3. In every case the individual was maladjusted and had not been able to resolve personal difficulties.
4. No question of gain or pleasure existed. In the larcenies small sums were taken, even when larger ones were available. They were not planned crimes.
5. In every case, the individual's crime reflected unfavorably on people or institutions, against which the converted criminal had repressed aggressions.
6. Capture in each case was made inevitable by the criminal either by out-right surrender or by leaving an obvious trail.
7. No insight existed as to the nature of these forces which led these men to commit these crimes.
8. Each of these men were model prisoners.
9. Each of these men had superior intelligence.

The most hopeful aspect of criminal conversion is the evident speed with which these individuals were able to understand the dynamics of their behavior. Through re-construction of the crimes and personal data as obtained from interviews and from supplementary legal evidences, the inciting causes seemed soon obvious to the therapist.

Through use of a modification of the Rogers,⁽⁴⁾ non-directive method, each of these individuals in less than three sessions were able to identify and explain their behavior. The flash of insight was immediate.

Mental therapy for such cases merely requires that a situation be brought about wherein the converted criminal can go over a period immediately preceding the crime. With very little direction, he will hover about the crux of the problem, as though he truly understands it, but is reluctant to mention it. Eventually with guidance and encouragement he will state it as an astonishing fact. In the first case, the inmate dramatically remarked: "It was my mother who drove me to marry that girl, she was against me. I stole the check to spite her! I wanted her to realize how she ruined my life."

In the second case, the reason given was: "I wanted to hurt my girl because she was sorry for me." And in the third case, the reason was: "I wanted to get even with my wife, make her sorry she left me."

It may be parenthetically stated that an opposite phenomenon, Ethical Conversion exists, which will be the subject of future analysis, wherein a well-established non-neurotic criminal, an essential criminal as it were, is suddenly converted from crime to ethical values in much the same way as the neurotic honest individual is converted to crime.

CONCLUSION

Criminal conversion is the immediate, unexpected, dramatic change-over of a law-abiding individual to criminalism. The individual is a neurotic who has not been able to meet his problems adequately and who finally explodes in a criminotic episode which has particular characteristics, such as: definiteness, completeness, obviousness.

The criminal convert is always caught, is a model prisoner, has high intelligence and no insight. Through use of release therapy he is quickly able to discover the mechanisms and dynamics of his behavior.

Whether this insight will prevent future crimes based on the same motivations is a matter of speculation at present.

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Latin American News and Comments

by S. B. KUTASH

The following were elected as officers of the Society of Psychopathology, Neurology, and Legal Medicine of Columbia:

President—Professor Guillermo Uribe Cualla

Secretary—Professor Herman Vergara

Treasurer—Doctor Alvaro Fajardo Pirzon

The Society also designated as Honorary Corresponding Members a number of well-known Latin American psychiatrists:

Argentina—Professors Osvaldo Loudet, Raimundo Bosch, Nerio Rojas and José Belbey.

Brazil—Professors Flamindo Favero and Hilario Verga de Carvalho.

Peru—Professor Guillermo Fernandez Davila, Leonides Avendano, Carlos Bambaren, Honorio Delgado, and Oscar Trelles.

Chile—Dr. Manuel Francisco Beca, Professors Arturo Vivado, Israel Drapkin.

Cuba—Professor Israel Casterranos, Dr. Arturo Sansores.

Ecuador—Professor Julio Endara, Dr. Agustin Cueva Tamariz and José Cruz C.

A regular scientific meeting of the Argentine Psychoanalytic Society was held on May 12, 1944 in Buenos Aires. Doctor Armino A. de Pichon Revieé presented an exceedingly interesting paper entitled, "The Analysis of an Eleven-Year-Old Child Using the Play Technique of Melanie Klein." A discussion followed in which Drs. Carcamo, Garma, Luis and Arnaldo Rascovsky, and Ferrari Hardoy, participated.

At the scientific session of July 28, 1944, Dr. Marie Langer delivered a fine contribution, "Some Contributions to the Psychology of Menstruation." After her excellent exposition Doctors Pichon Rivière, Tallafarro, Garma, Arnaldo Rascovsky, and Carcamo gave their points of view. The entire paper is published in the October, 1944, issue of the *Revista de Psicoanalisis of Argentina*.

Dr. Enrique Pichon Rivi re recently completed the first semester of his course in the theory and practice of psychoanalysis given at the Mercedes Hospital in Buenos Aires. The class was well attended and the students all felt well rewarded for their time and effort. The curriculum covered the following topics: the general theory of the neuroses, problems of etiology and pathogenesis, the classification of mental illnesses, and limitations in clinical pictures. Special emphasis was placed on the study of the perversions.

In the second semester, Dr. Rivi re plans to devote the major time of the study of the neuroses, the psychoses, and character disturbances.

The Society of Neurology and Psychiatry of Buenos Aires is now organizing the First Congress of Neurology and Psychiatry. Among the highly important papers announced thus far, are the following:

Clinical Elements in the Prognosis of the Schizophrenic Psychoses by Drs. Ramon Melgar and Pichon Rivi re of Argentina and Professor Arturo Vivado of Chile.

The Cortical Form of Cerebral Arteriosclerosis by Dr. E. Gatti.

The Psychopathology of the Awareness of Time by Professor Honorio Delgada of Peru.

Psychopathic Episodes in Psychopathic Personalities by Dr. Brucher Encina of Chile.

The Organization of a Center of Malariotherapy by Dr. Silvio J. Orieco of Brazil.

The Premorbid Personality of General Paralytics and its Relation to the Clinical Form by Max Arndt of Argentina.

Cocamania in Bolivia by Dr. Emilio R. Fernandez of Bolivia.

The Anatomico-Clinical Study of Encephalitis by Dr. Vicente Dimitri.

Two Cases of Wilson's Disease by Prof. Teodoro Francassi.

Carrion's Disease, Neurological Aspects by Prof. Oscar Trelles of Peru.

The Teaching of Psychiatry in Argentina by Prof. Gonzalo Bosch.

Psychogenesis of Peptic Ulcer by Dr. Angel Garma.

Psychoanalytic Considerations on the Actual Precipitating Situation in 100 Cases of Juvenile Epilepsy by Dr. Arnaldo and Luis Ras-covsky.

Pathogenesis and Dynamisms of Epilepsy by Dr. Enrique Pichon Rivière.

A Contribution to the Psychopathology of the Aged by Dr. E. E. Krapf.

Psychiatric Syndromes of Progressive General Paralysis by Dr. M. Sbarbi.

Alterations of Spermatogenesis in Epileptics by Dr. B. Moyars.

On August 4, 1944, a dinner was held at the Alvear Palace Hotel in Buenos Aires, sponsored by the members and friends of the Argentine Psychoanalytic Association in honor of Francisco Munoz and Emilio Antona and to celebrate the First Anniversary of the *Revista de Psicoanalisis*. This important journal was established through the generous aid of the two guests of honor.

The famous psychiatrist from Ecuador, Professor Julio Endara, recently visited Bogota, Columbia at the invitation of the National University, to deliver a series of lectures in his specialty. His stay of ten days, during which he spoke at four conferences, was an eventful experience for those who heard him lecture. His topic at the Faculty of Medicine Conference was "*Rorschach's Psychodiagnostics*" and at the Faculty of Law Meeting, he spoke on *Caldas and Espejo*, great scientific figures of Columbia and Ecuador.

Later, a reception was held for the visiting Professor at a specially convened session of the Society of Psychopathology, Neurology and Legal Medicine of Columbia, during which he was named an Honorary Corresponding Member of that organization.

The meeting was a very momentous occasion during which a speech of welcome and appreciation was made by Professor Guillermo Uribe Cualla, President of the Society. Professor Endara responded eloquently in his acknowledgment of the honor bestowed upon him.

There are at present eight laboratories and clinics for child study in Cuba as follows:

Laboratorio de Paidolgia, School of Education, University of Habana. Established in 1916 by Dr. Aguayo.

Laboratorio de Paidolgia, Instituto Cívico Militar in the town of Aeyo del Avila. Established in 1937.

Laboratorio para El Estadio del Nino, Alfredo M. Aguayo Municipal School, Habana. Established in 1938.

Laboratorio de Psicología Individual, School of Education, University of Habana. Directed by Dr. José M. Gutierrez.

Clinica Psicopedagogica, School of Education, University of Habana. Founded in 1918 by Dr. Aguayo. Now under direction of Dr. Aurora Garcia.

Clinica de Psicología del Adolescente, School of Education, University of Habana. Under the direction of Dr. Piedad Maza.

Clinica de Investigacion Pedagogia, School of Education, University of Habana. Under the direction of Dr. José M. Gutierrez.

Laboratorio de Psicología, Faculty of Philosophy, University of Habana. Established by Dr. Agramonte in 1934.

Proceedings

...of...

The Association for the Advancement of Psychotherapy

OFFICERS

PRESIDENT: FREDERIC WERTHAM, M. D.

SECRETARY TREASURER: EMIL A. GUTHEIL, M. D.

VICE PRESIDENT: JOSEPH WILDER, M. D.

EDITORIAL

The Association for the Advancement of Psychotherapy is a progressive scientific organization devoted to the study and furtherance of different aspects of psychotherapy. The members of the Association are for the most part psychiatrists and psychoanalysts, but the group also includes general practitioners and specialists in other branches of medicine who are interested in the advancement of psychotherapy.

One of the main aims of the Association is to provide a forum in which the different schools of psychoanalysis and psychotherapy can express their views and present their findings and methods in the setting of a general discussion. The emphasis of the endeavors of the group is on the further development of psychoanalytic theory and practice and, in particular, on the working out of *brief methods of psychotherapy*. Another aim is to take up concretely all medical activities subsumed under the heading of *psychosomatic medicine*. At the meetings of the society, leading specialists in the various medical fields, such as ophthalmology, gastro-enterology, endocrinology, etc., have come together with psychoanalysts and psychotherapists and have discussed methods for collaboration in research as well as in practice. In their discussions, some of them have stressed the point of view of natural science; others, in their endeavor to follow through a truly contemporary study of psychopathology, have considered the social aspects of the causation and treatment of nervous disorders.

The Association holds regular monthly meetings on the last Friday of every month. It also arranges regular Seminars on the subject of psychotherapy, psychoanalysis, brief psychotherapy, psychosomatic medicine, child psychiatry, criminology, etc. Under the auspices of the Association, also, various *projects of research* are carried out. For

example, a study of the ideology of adolescents was conducted by Dr. F. Wertham, in an "experimental guidance seminar." The speaker also presented a practical form of group psychotherapy for delinquent and pre-delinquent children. (The case of the "Hookey Club.")

SCIENTIFIC MEETINGS

The 54th regular meeting of the Association was held on April 27, 1945. The program of the evening was the showing of a motion picture, entitled "Psychiatry in Action, Diagnosis and Therapy of War Neuroses in an Emergency Hospital."

The chairman, Dr. Frederic Wertham, introduced the picture to the audience and encouraged the members to discuss at length the individual methods of treating the psychiatric war casualties presented in the film. The interest in the presentation was so great, that the meeting had to be moved to a larger lecture hall. Drs. Foster Kennedy, E. A. Manginelli, and Joseph Wilder took part in the discussion.

The spring season was concluded with the 55th regular meeting of the Association which was held May 25th, 1945. The program of the evening included Dr. Frederic Wertham's remarks on "Emotional Reactions in Russian Children under Nazi Occupation (Based on Observations by Russian Child Psychiatrists)" and Dr. Emil A. Gutheil's paper on the "Psychopathology of Fatigue (Case Presentation)." Dr. Joseph Wilder presided.

In the discussion following the two papers, Drs. Alfred Angrist, Gustaf Blass, Mildred Burgum, H. S. Ephron, G. B. Lal, Matthias Nachumi, John L. Simon and Jean Smith participated.

DISCUSSION

Gustaf Blass, M. D.: "My remarks pertain to Dr. Wertham's paper on the mental disturbances of Russian children who lived under German occupation. I wish to refer especially to the therapeutic approach mentioned by the speaker, namely, that the children are made to overcome their fears by playing that they shoot Germans. In my opinion, this substitution of hate and aggression for anxiety has important individual and social aspects."

"To the individual child this activity is beneficial, since it aids him in compensating the traumatic experience of utter helplessness in the face of cruel oppression. Play is the child's means of overcoming some of the pressing problems of reality and of fear associated with them. If a child is afraid of dogs, it is good to give him a puppy. As a temporary measure this method may have its merits. However, it seems to me that instilling hate into a child's mind is a dangerous procedure. I am not certain that we know definitely when or how to stop. Let us not forget that the Germans, too, instilled hatred against Jews and communists into the minds of their youth. We have witnessed the disastrous effects of it. The Russian society may, in years to come, see similar effects in these children, at a time when the whole humanity, including the German people, will be working hard for the establishing of ties of mutual friendship and cooperation."

John L. Simon, M. D.: "Independently of theoretical considerations about the redirection of psychic energy from fear to rage, we know empirically that training diminishes fear. When soldiers are best versed in techniques of meeting danger they are least frightened. Recent war experience, especially in the Spanish Civil War with which I am best acquainted, has emphasized this lesson. Meaningful activity has great therapeutic value. Perhaps the Russian treatment of children is partially based on this experience. Certainly, it seems indicated to give the children concrete activity with which to meet the threatened situation if repeated."

"To turn to the other paper, does Dr. Gutheil mean that there is a physiological component in psychogenic fatigue? Janet, who considered the problem extensively, answered the question in the affirmative. He cited the analogy of a man pushing against a wall with great expenditure of energy. Even when no motion is visible, muscular contraction involves many minute movements which are no less productive of fatigue. This is the situation which prevails in chronic tension states."

Dr. Gutheil's beautiful analysis of his case was a source of pleasure to all of us. I hope that in his reply to discussion he will go further and tell us to what extent his patient has so far been helped."

Joseph Wilder, M. D.: "I should like to know whether Dr. Wertham is satisfied that according to the report quoted here the mental changes following malnutrition (especially hypoglycemia and B-avita-

minosis) in children have been separated from purely psychological reactions. This is very important from the standpoint of therapy. Some of the mental changes described, though not all of them, are strongly reminiscent of the apathy, mutism, etc. described in Russian adults during the famine in the Wolga region in the twenties (Rosenstein). In those cases where among the affected individuals cannibalism and necrophagia were observed, starvation alone was considered as the cause of mental changes.

"With regard to Dr. Gutheil's paper, it is interesting to watch how in the course of the last twenty-five years the so-called neurasthenic syndrome in which chronic fatigue is the leading symptom is breaking down into a great number of other physical syndromes. (Anemia, endocrine disturbances, myasthenia, narcolepsy, hypoglycemia, avitaminosis, etc.) Lately, we are becoming aware of the great number of cases of psychogenic fatigue. In most cases it is not difficult to differentiate the organic from the psychogenic fatigue. One point, e. g., rightly stressed by the Mayo clinic, is that the physical fatigue increases as the day progresses, while the psychogenic fatigue diminishes in the evening, since the patient's particular problems are then left behind and he is looking forward to the peace of the night. Dr. Gutheil's case shows that there are exceptions to the rule; his patient's problems (social life, sex, etc.) become acute in the evening and, therefore, his fatigue was great also in the evening.

"I have once described briefly an organic syndrome which I called "uratic asthenia." It is due to an accumulation of uric acid in the blood. In that syndrome the fatigue which is due to hyperuricemia is especially bad in the morning, and in fact, after every prolonged bed-rest alongside with the corresponding increase in uric acid. It disappears after physical exercise.

"The psychogenic fatigue may be a symptom of any form of neurosis, not only of anxiety neurosis; it may be a compulsive ritual, an hysterical conversion symptom and the mask of a depressive state."

The first scientific meeting of the fall season (56) will be held Friday, October 26th, 1945. Its topic will be: "A Psychosomatic Study of Myself." Dr. Wertham will discuss the physical and emotional reactions, experienced during his recent illness (thrombophlebitis).

SEMINARS

During the Spring, 1945 Season Dr. Joseph Wilder held a seminar on "Psychosomatics" (ten sessions) and Dr. Lionel Goitein on "The Psychodynamics of the Unconscious" (five sessions).

In the fall season, Dr. Emil A. Gutheil will hold a seminar on "The Practice on Active Analysis (Advanced Course)". The Seminar will be devoted to the discussion of case histories, the psychodynamics, and the therapeutic indications of the individual cases.

Beginning—Monday, September 24, 8:30 p. m. sharp.

Duration—8 Mondays.

Fee—For Members \$10.00; for non-members \$20.00.

Place—16 West 77th Street, N. Y. C.

Physicians who wish to join the Association, or to attend the seminars and lectures may apply to the Secretary-Treasurer, Dr. E. A. Gutheil, 16 West 77th Street, New York 24, New York, Phone Endicott 2-3754.

LECTURES ON PSYCHOSOMATIC MEDICINE

The Graduate Education Committee of The Medical Society of the County of Queens is presenting a seminar course, "Psychosomatic Medicine for the General Practitioner," in twelve sessions, by the President of the Association for the Advancement of Psychotherapy, Frederic Wertham, M. D., Director of the Mental Hygiene Clinic, Queens General Hospital, and Senior Psychiatrist of the New York Department of Hospitals.

The Program of the Lectures is as follows:

1. Friday, October 5th, at 4:30 p. m.: "The Human Constitution and its Significance in Physical and Mental Disease."
2. Wednesday, October 10th, at 2 p. m.: "The Returning Veteran and His Wife."

3. Wednesday, October 17th, at 2 p. m.: "An Outline of Medical Psychology."
4. Wednesday, October 24th at 2 p. m.: "How Does the Brain React to Physical Disease and Injury?"
5. Wednesday, October 31st at 2 p. m.: "Menstruation, Pregnancy and Involution."
6. Wednesday, November 7th, at 2 p. m.: "Sexual Perversions and Homosexuality; Diagnosis and Treatment."
7. Wednesday, November 14th, at 2 p. m.: "Some Common Physical Diseases and Their Mental Correlates (heart disease, tuberculosis, asthma, etc.)."
8. Wednesday, November 21st, at 2 p. m.: "Medical Testimony in Court by Physicians and Mental Health Specialists."
9. Wednesday, November 28th, at 2 p. m.: "Problems of the Growing Child."
10. Wednesday, December 5th, at 2 p. m.: "The Aging Process and Its Disorders."
11. Wednesday, December 12th, at 2 p. m.: "Alcoholism and Drug Addiction."
12. Wednesday, December 19th, at 2 p. m.: "Endocrines and the Vegetative Nervous System."

Obituary

Bruno Solby, M. D., died in Washington, D. C., September 8th, 1945, at the age of 42.

Dr. Solby was a Charter Member of the Association and its first Secretary-Treasurer. During the war he served as a Captain with the M. C. of the Army Air Force; later, after his medical discharge, as a Surgeon with the U. S. P. H. S. He was Chief Psychiatrist of a Mental Hygiene Unit which he helped organize.

In his professional work he was highly gifted and very successful. His views were independent and original. He favored the application of psychoanalytical concepts to social conditions, and published a number of articles dealing with this problem. The latest was "*A Theory of Mental Hygiene in Industry*," in which he dealt with the timely questions of Job Value and Job Adjustment. (*Mental Hygiene*, XXIX, 3, 1945).

He leaves a widow and an eight-year-old son.

Emil A. Gutheil, M. D.

Secretary.

Announcements

THE PHILADELPHIA PSYCHOANALYTIC SOCIETY

The Philadelphia Psychoanalytic Society was organized on October 27, 1937, and on May 7, 1939, was accepted as a Constituent Society by the American Psychoanalytic Association.

The Charter Members were as follows: Dr. Sydney G. Biddle, Dr. O. Spurgeon English, Dr. Leroy M. A. Maeder, Dr. George W. Smeltz.

Former Presidents of the Society were: Dr. Sydney G. Biddle, 1939-1941; Dr. O. Spurgeon English, 1941-1943; Dr. Gerald H. J. Pearson, 1943-1945 and continuing.

The undersigned has been, from the inception of the Society and continuing, the Secretary-Treasurer.

The Active Members of the Society are:

Kenneth E. Appel, M. D.; Sydney G. Biddle, M. D.; Capt. Morris W. Brody, (MC); O. Spurgeon English, M. D.; G. Henry Katz, M. D.; LeRoy M. A. Maeder, M. D.; Gerald H. J. Pearson, M. D.; George W. Smeltz, M. D.; Col. Lauren H. Smith, (MC).

The Associate Members are:

Robert S. Bookhammer, M. D.; Herbert Freed, M. D.; Paul Sloane, M. D.

Non-Therapeutic Affiliate Members are:

Ray H. Abrams, Ph. D. (Sociologist); Phyllis Blanchard, Ph. D. (Psychologist); Edward Weiss, M. D. (Internist).

As indicated the Philadelphia Psychoanalytic Institute is the training institution of the Philadelphia Psychoanalytic Society; the Institute is conducted by the Officers and the Educational Committee of the Society.

LeRoy M. A. Maeder,

Sec.-Treas.

Abstracts From Current Literature

A - Psychoanalysis

CIVILIAN WAR NEUROSES AND THEIR TREATMENT. FELIX DEUTSCH, M. D., *The Psychoanalytic Quarterly*, 13:300-312, No. 3, 1944.

The author presents a practical and scientific approach to the problems posed by individuals who were rejected for psychiatric reasons by the armed forces at the induction. The psychiatric clinic of the Boston Psychoanalytic Institute under the direction of the author, undertook the important task of treating these individuals. Their material came from social agencies and kindred institutions.

So far the clinic has dealt with the conflicts developed by men who anticipate induction, men who are rejected at the induction stations, and men who are discharged from the service; also with the problem of their relatives and friends. In most cases rejection or discharge orders were given because it was thought that the recruit would not be able to stand the stresses and strains of Navy or Army life ("inaptitude discharge"), or because of undesirable character traits, including the psychopathic personality and borderline conditions.

People with an extremely labile psychologic equilibrium react to the war-related experiences in a neurotic or psychotic way. Those whose mental balance is dependent upon the use of specific protective mechanisms are likely to lose that balance when the use of these mechanisms is disturbed by the war conditions.

The foremost impression derived from the author's observations is that the civilian war neurosis is a family neurosis par excellence. It is centered in the individual who is directly involved in the military matter; he is then either the contagious member, or he becomes the target and victim of the neurotic reaction of his environment. This fact is of great importance from the standpoint of psychotherapy, because the treatment, as in child analysis, reaches out to a group of people whose shaken equilibrium must like-

wise be re-established. The civilian neurosis is a mixture of the peace-time neurosis and the soldier neurosis. It is assumed that the patient's unresolved inner struggle has existed before the traumatic experience from without (related to war conditions) took place.

A difference between the combatant and noncombatant neurosis lies in the etiological role the group organization plays in the neurosis. The soldier joins a homogeneous group which puts him under new rules, but these rules render him equal with others: a factor which gives him protection and care and relieves him of his former responsibilities. His daily obligations are simplified and unified. Belonging to a potentially forceful group in the military organization gives the soldier a feeling of security which the civilian lacks. This self-assurance may exceed normal limits and lead to a belief in invincibility, infallibility and invulnerability, which belong to a kind of heroic concept.

Such ideas are not entirely conscious. They materialize when one soldier is accepted by the others on equal terms and feels obliged to live up to this role or to exceed it through special deeds. The conscious attitude towards military achievement may be so realistic that there is no suspicion that the apparent adjustment to the new realities has been accomplished only through the medium of fantasies. The consequent dangers become apparent only at the moment of a neurotic breakdown. This is different from true heroism which is an expression of the capacity of overcoming a realistically evaluated danger, and is a sign of maturity. The actions of such a personality are not undertaken to become a hero, though they may result in being heroic, while the actions of an immature or passive personality strive to fulfill a heroic fantasy by acting out infantile ideas of grandeur or omnipotence.

The main obligation of the soldier is to be aggressive at the right moment and

with the proper weapons, usually not as an individual but in common with his comrades. The fear of danger from without is hereby minimized. All the aggressive tendencies can be projected against external objects. These are the main elements which change the former equilibrium of the soldier's emotional life. The group formation to which he belongs backs him up by means of ordered discipline.

The civilian acquires "morale," that is the will to resist aggression by developing hostile feelings against the menace coming from the outside, but all these feelings are curtailed by the same restrictions that govern his social life. The patient's conflicts revolve around the fear of his own aggression. Other individuals involved (the family) act simultaneously by contagion or as participants in the conflict. The following are two illustrative case histories from 10 used by the author.

A 24 year old boy was deeply hurt and rebellious because he was rejected by the draft board. He did not want to remain a "sissy" among girls. The blow of being rejected as a man had destroyed the equilibrium of this fundamentally passive, dependent boy who, under the protection of his grandmother, mother and sister, had vacillated between his infantile notions of grandeur and his need of dependency. He played the part of the big man for these three women who accepted him lovingly and backed him up against a powerful blustering father and two older brothers. He returned to their shelter whenever he failed to compete with these successful men. The rejection by the draft board meant to him that he had failed in competition with the men and that he had been rejected by the women in his role as a man. Following this blow, he immediately became intoxicated, started a fight and knocked out three people. He then went to bed with three girls in one night. After that he had spells of drinking and gambling, stopped working, committed minor delinquent acts, and changed from one girl to another. In the course of the treatment at the clinic, these symptoms slowly subsided, and today he has made a fresh adjustment to life.

Another insignificant little man of the

Babbit type with a great amount of self-esteem had an immature, passive, and dependent son, an only child, in whom he encouraged an infantile, transient interest in machinery and radio hobbies. He likewise urged his son to volunteer for the Navy. This prospect of becoming a man by means of the tools of his childhood ambitions pleased the boy and he enlisted. However, a few weeks later he broke down when he found himself in the position of having to act like a man, when he had anticipated only the application and continuation of the happy play of his childhood. He was soon discharged because of homesickness and anxiety states, and was referred to the clinic.

Then the author describes the activities of the clinic as follows: "The staff of the clinic is attempting to work out an emergency psychotherapy based on psychoanalytic principles and on the method called associative anamnesis. Effort is made to exclude as far as possible all fact finding from the interviews in order to (a) save time and to use even the first interview for therapeutic purposes; (b) to avoid questions not derived from the associative material brought by the patient; (c) to initiate from the beginning a planned psychological process to be carried over from one session to the next."

In order to provide the necessary freedom for the physician the following procedure is applied: (1) a letter of referral is ordinarily sent to the clinic by the referring source before the first social worker interviews the patient; (2) every patient is interviewed by the psychiatric social worker, who gathers the relevant facts of medical and social history, makes financial arrangements and secures the patient's authorization for obtaining relevant data from hospitals, doctors, etc.; (3) the psychiatric worker makes and maintains continuous contact with members of the family, with the patient, or with the referring institutions; (4) the staff member assigned to the patient has personal contact with the patient throughout the treatment in a manner similar to that of analytic procedure. All information and advice for the patient's relatives and friends lies in the hands of the social worker, who obtains the necessary instructions and re-

mains informed about the progress of the therapeutic procedure. In some instances two or three of the patient's relatives or friends (when they were participants) have been treated simultaneously by different staff members, as it was thought that this procedure would shorten the patient's treatment. From time to time special conferences were held to survey all the factors in the patient's illness.

George Major, M. D.
Reading, Pa.

PSYCHODYNAMICS IN A CIVILIAN WAR NEUROSIS. JOHN FROSH, *The Psychoanalytic Quarterly*, 13:186-197, No. 2, April 1944.

Expectations that this war would produce a large number of civilian war neurotics have not been fulfilled, according to the author and several other writers from abroad.

A case is cited of an American woman aged 43, who was exposed to several bombings in London. During one of these, her husband was killed by a direct hit which demolished their home. She was quite ill when she was admitted to the Bellevue Psychiatric Hospital. The author has carefully tabulated the clinical picture of the case revealing her immediate "manifest" symptoms as follows:

I. *General Symptoms*: Tension; jittery and jumpy feelings; perspiration and palpitation; hyperacusis; irritability; constant tremor, especially of left hand; night terrors; fear of being injured; general lack of confidence and feeling of helplessness with work impairment and withdrawal from people and environment in general.

II. *Marked depression*, connected with the feeling that life is not worth while; discouragement, lonesomeness and suicidal ideas.

III. *Attacks*: Body got numb and stiff; she was unable to speak or move and had a feeling of weakness; she displayed facial twitching and grimacing and complained of a feeling of impending death, with marked anxiety.

These three groups of symptoms came on quite suddenly, one to nine days after the traumatic episode.

In discussing the therapy, free associations proved to be of no value. The author resorted to hypnosis, hypno-catharsis and hyno-analysis as described by Hadfield. These procedures gave him an opportunity to study the latent dynamic factors.

The depressive features of this case revealed that the patient had a strong feeling of guilt, and felt that she was responsible for her husband's death. He was killed when he came home to save her. She thought that he was still alive when she was taken out and walked over the area where he was buried by debris, insisting that he could be saved. There was no basis in reality for her self-accusations; the motive was deeper. A premonitory dream revealed that death thoughts existed before her husband's death. Further in the treatment, minor relevant incidents indicated that there had been an accumulation of unexpressed deep-seated and prolonged resentment against her husband.

The patient's sexual transgression with an old friend of the family shortly before hospital admission, resulted in impregnation. This incident gave a clue to the plight of her own marital life. She was married and divorced twice before, the first time at eighteen. Two pregnancies had to be interrupted because of pernicious vomiting. She was married again to a man who was impotent and with whom she had no sexual relations for ten years. She denied any resentment on this score and also any sexual desire for him; yet she revealed that when her friend made sexual advances to her, she realized how she had suffered during the ten years of abstinence. She also recalled a scene in which she found her late husband in an intimate act with a woman-friend of the family and other situations which led her to believe that he was unfaithful. She blamed her husband for her present troubles and for his not staying at home during the bombing as he had promised. All this showed that in reality she was embittered and resentful.

Interesting is the explanation of the syncopal attacks which came on nine days after the traumatic experience. Under hypnosis the original traumatic scene was

recalled and "when events connected with other attacks were recalled, she would have exactly the same reaction." The author discovered aggressive thoughts against her husband which were brought to a climax by mention of the husband's sexual delinquencies and her own resentment.

The anxiety symptoms were explainable also on the basis of the hostility toward her husband; they were a defense mechanism against her feeling of guilt as were the depressive symptoms. "Under hypnosis, the anxiety would at time mount to a point which would be climaxed by the onset of an attack."

The clinical features of this "civilian" case grossly resemble those met with in the neuroses of soldiers, i. e. in traumatic neuroses. One cannot deny the role of the actual trauma in all these cases with their attendant fear and anxiety when there is a threat to the body integrity. The core of these symptoms, however, can be understood only if one delves deeper than the manifestations of the immediate traumatic incident. The author is of the opinion that in these cases behind the traumatic situation a more basic conflict is hidden with which the trauma may become interlocked. Its importance in the psychodynamics of the traumatic experience must be evaluated. Without it many a trauma fails to give rise to a "traumatic neurosis."

George Major, M. D.,
Reading, Pa.

AFFECT, PERSONAL AND SOCIAL. GREGORY ZILBOORG, M. D. *The Psychoanalytic Quarterly*. 14:28-45, No. 1, 1945.

Before Freud, social psychology was the field of sociologists or philosophical psychologists. They went but little beyond phenomenological concepts and stressed particularly the role of imitation and leadership in mass behavior. Karl Marx was the first to recognize the importance of a specific ideology for mass psychology. He saw clearly the possibility that an individual might identify him-

self with an ego ideal rather than with a person, and that this ego ideal might even be hostile to the individual's own interest. He anticipated thereby Freud who stressed the role of the unconscious in mass behavior. Freud maintains that no individual can be isolated psychologically from his social atmosphere and that each person is bound by ties of identification in many directions, to many groups. Therefore, personal and social affects are closely interwoven, and are difficult to differentiate. It is for this reason that many sociologists regard psychoanalysis as too personal and lacking a social theory, whereas, on the other hand, the psychoanalysts apply to society and culture the findings of personal psychoanalyses in an often unjustified parallelism. They see in the society an institution suppressing the free flow of libido, and creating instinctual conflicts and tensions which lead to the so-called "social neuroses."

Freud, an individualist and not interested in sociology primarily, made, nevertheless, valuable contributions in this field. He explained in terms of dynamic psychology what others had presented in form of descriptive data. He recognized the regressive nature of mass behavior and the primitiveness of the mob, and looked upon society as upon a colossus which restricts and injures man's instinctual life.

When two people get together for the purpose of sexual satisfaction they seek solitude, demonstrating in this way against the herd instinct and the group feeling. Only when the tender, that is the personal factor, in the love relation gives way to the merely sensual one, sexual intercourse, in presence of others, or in groups, becomes possible. This is the case in orgies.

Freud's intuition gave us the first hint that love, when based on tender feelings, may run counter to the gregarious nature of man, and also that grouping of individuals may be based on instinctual license. He therefore assumed that society as well as the individual can regress to lower libidinous levels and develop a neurosis. The psychoanalyst thus succumbed to the human weakness of anthropomorphism. Freud saw the group as a provisional organism formed of hetero-

genous elements which combine like the cells of a body to form a new being, with characteristics very different from those possessed by each of the individual cells.

The author disagrees with this theory. In order to find the difference between personal affect and group reaction, he describes a case of anxiety neurosis, of his own observation. It serves to show that the ego structure in neurosis is preserved to the fullest extent, and that the patient is fully aware of some strong inner force which impedes the patient's normal function. The patient's conflict was purely personal, while outside factors and circumstances served only as vehicles for the personal conflict. They did not affect the true nature of the neurosis.

The attitude towards reality, both as reality and as a stimulus and vehicle for one's fantasies, is characteristic for the personal affect, the normal as well as the neurotic. The author compares with these findings the characteristics of the social affect. He makes a distinction between the individual's social behavior, i. e. his behavior as a member of society and his affective reaction as a member of the mob. In mob action the individual's ego is lost, his acts are violent, impulsive and explosive. He cannot explain afterwards why he acted the way he did. He does not know what has come over him. In contrast to that, the individual's social affect and behavior are not impulsive, and not explosive, and the ego is well integrated. The person considers his opinions on public issues as his own, although he may share them with others—when the others agree with him. The social affect is steady and stable and marked by an enduring sense of loyalty toward a special group within the social whole. It is a combative loyalty, a readiness to defend the rights and interests of one group against another group. It is not a solidarity within a group which is based on love but cohesion based on hate of the common external enemy.

It is obvious, therefore, that the determinants for these affects are not purely libidinal in origin, but that they use the individual's libidinal equipment for the special purposes of the given group. It is the cultural economic factors which cap-

ture the psychobiological apparatus of man and determine the social affect. This affect is marked by watchfulness and hate, but is not devoid of Eros.

The member of the mob loves his hero ecstatically; and whereas the love of the normal and neurotic is directed toward a specific object, the love in a social affect is impersonal; it is directed toward a remote invisible goal, toward a future ideal. The cathexis rests on the fantasy, not on the object, and members of the same group are loved only by narcissistic identification.

Which then are the instinctual elements that are brought into play in social affects? There is hate, which is coupled with aggressiveness and destructiveness. Then there is the drive to power, towards hoarding of wealth, etc., and there is revengefulness. The personal affect reacts against murder, but the social affect asks for "justice" which often means the supreme penalty. The personal affect is against revengefulness, while the social affect demands "eye for eye." The personal affect rejects selfishness and boastful self-delight, while the social affect is conspicuous for its glorying in the so-called "enlightened self-interest" of the given class or state and in eulogizing their respective past, present and future greatness and achievements.

Thus it is evident that social affects are based on gratification of pregenital libidinous drives, which the personal affects are always thwarting. Under the cloak of ideology and rationalization our civilized social structure harbors pregenital drives which in our social functions are given a much greater play than the genital, object-libidinous drives. Perhaps that is the reason why Freud spoke of love as being directed against the herd instinct, and of regression to the sensual level as being in agreement with the gregarious trends. It means that each individual that enters into the formation of society must mobilize and use his pregenital instinctual drives in order to maintain this "provisional body of cells."

Social psychology therefore can be called the psychology of pregenital drives. An individual who tends to act on this level is considered "regressive;" society on

the other hand acts normally on this level. Therefore one can not say that in social crisis it regresses to a lower libidinous level, nor can one speak of "social neuroses." It follows also that there can be no social therapy in a psychological sense.

Social therapy lies outside the scope of clinical psychology. It must be applied as a branch of sociology. Psychology cannot cure disastrous economic or cultural forces any more than economics can cure a case of anxiety neurosis.

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CONTRIBUTION TO THE STUDY OF AMNESIA
AND ALLIED CONDITIONS, ELISABETH R.
GELEERD, FREDERICK J. HACKER AND DAVID
RAPAPORT; *The Psychoanalytic Quarterly*,
14:199-220, No. 2, 1945.

The authors describe five fugue states states all of which were characterized by a change in consciousness and by complete of partial amnesia for the events that took place during the fugue. The amnesic period was usually marked by a sharp beginning and end.

The contrast to those cases of frank psychosis where personal identity is lost, or to those where the "feeling of 'me-ness'" is somewhat changed although the awareness of the personal identity is retained, the patients described in this paper were to a large degree able to recover the memory of the amnesic period. They were treated with various psychoanalytical, clinical and psychological experimental methods. Sodium amytal was also used. The authors investigated the precipitating factors, the onset and content of the fugue and the total personality of the patients, including the special kind of repression at the root of this type of amnesia.

It was found in practically all cases that, during the amnesic episode, the patients lived out certain fantasies. This finding corresponds with reports made by numerous other observers and leads the authors to the belief that the amnesic experience fulfills an economic function.

There is a remarkable similarity between the disguised wish fulfillment of the dream and the fugue state. This assumption is supported by the fact that the inception of the amnesic period and the awakening from it is frequently identical with that of sleep and that, in addition, the patients themselves, once they are able to recall the events of the fugue, describe them as "dreamlike".

As far as the fulfillment of forbidden wishes in dreams is concerned, the dreamer's ego may be somehow justified in disclaiming any responsibility for the dream, since there are no reality consequences. Whatever changes are produced are purely autopsychic ones. But in fugue states the wish fulfillment is actually lived out. This, however, is only possible if the patient gives up his identity by either assuming a new one, or by simply forgetting who or what he was before. It appears that a relaxation of superego censorship, similar to that occurring in dreams, takes place during the amnesic period.

That the ego continues to function to some degree during the fugue is proven by the fact that the wishfulfillment is achieved with the aid of perfect motor coordination. As in dreams, the instinctual drivings remain dominant and are condensed into one single idea which excludes everything else.

Thus one of the cases reported, a thirteen year old girl, would act out her libidinal wishes by — literally — running away from her home at times. Without knowing what she was doing she would run much faster than she was able in her waking state, vehemently fighting off anyone who would try to restrain her. On one occasion she ran into the negro district of her city which as the analysis brought out later, represented "dirty sexuality."

During the amnesic period, the ego loses temporarily consciousness of itself as being different from its environment and also its function of "maintaining the sense of position in time and space". For these reasons, the fugue state might be considered a psychotic one. Yet there is no disturbance of coordinated activity such as is found in confusional states or outright psychosis. On the contrary, as has been

stated before by many authors, the affected individual is able to carry out a great number of highly complicated and coordinated actions in the process of finding wishfulfillment. This factor is one of the main causes why amnesic patients frequently remain undetected for a long period of time since there is nothing in their behavior to distinguish them from normal persons.

The ego represses certain tendencies and wishes which are unacceptable to the superego by means of countercaathesis. The superego forces the ego to fulfill its demands by creating anxiety. It seems that the anxiety caused by the threat of the superego is ignored by the ego if it is equalled or outweighed by the anxiety produced by a reality situation.

In this way, one of the cases examined by the authors was, for two weeks, able to play the role of a physician when imprisoned by the Gestapo, although he had never before had anything to do with medicine. The fact that he was regarded as a doctor enabled him to occupy a somewhat better position in the prison than otherwise. He actually treated a man who had developed a strangulated hernia without difficulty and fully convinced everybody, including himself, that he was a physician. He suddenly awoke when his case came up for trial, expressed his surprise at being called "Herr Doktor" and had some difficulty in convincing the Gestapo of his true identity.

It was found later that the man had always had the fantasy of being a doctor, that he had been unable to study medicine for financial reasons and that the fantasy was an oedipal one, repressed because of castration fear. It broke through, however, when the outside situation became threatening enough to outweigh the fear of the superego.

In fugue states, the control the superego normally has over the ego is eliminated and the previously forbidden id tendencies break through, seizing the consciousness to the exclusion of everything else. Moreover, they enable the patient to completely repress the previous conscious ego content. The fact that such repression takes place while other parts of the ego have ceased to function leads

to the conclusion that the ego must be "split". This division can only be possible according to certain patterns: "... each part of the ego retains its integrative synthetic function and acts as a whole." Around that part of the ego that is not repressed a new personality is built and the id wishes still have to submit to some form of ego organization although this may be different from the one that existed before.

The authors are of the opinion that the elimination of the normal superego function may be brought about "by a reversal of the process by which the superego was originally created" (that of parental reality threats).

It would seem that during the amnesic period the superego, or parts of it, are again taken over by some authority in the outside world. Alexander has shown that in compulsion neuroses forbidden wishes are gratified in compulsive symptoms, "behind the screen of formalistic obedience". As was also stated by Mitchell in 1888, the ego seeks some socially acceptable excuse to fulfill id strivings. Thus the man in the prison became a physician because one of his fellow prisoners appeared to be in need of medical attention. The gratification of the forbidden wishes and the fugue state itself is only possible through compliance with the demands of the outside world which temporarily has been endowed with the function of the superego.

The economic function of every neurosis is to free the ego from anxiety. This can only be achieved if the superego can be convinced that the ego has no responsibility for what is going on. In fugue states, this problem is radically solved by the splitting off of one part of the ego and the complete repression of the previous conscious ego content. Since the superego is at the same time projected onto the outside world, the ego is able to live out its forbidden wishes without fear of punishment from the superego. The amnesia following the fugue is due to the fact that the superego, after awakening, forces the ego to repress both the fantasy and the memory of the events that took place during the fugue. The authors assert that "there is a similarity between the

mechanism of isolation in compulsion neuroses and the splitting off of parts of the ego in fugue states."

The ego of the amnesic patient may be compared in its weakness to those stages of infantile development when it has not yet achieved its full capacity for reality testing and when it projects everything painful onto the outside world.

It must be remembered that the superego is not only a strict and punishing force but that it is also capable of loving the ego as a reward for the fulfillment of its demands. This is one of the most important roots of "secondary narcissism". Alexander compared the function of the superego in its repressing capacity to that of a police force using its authority against the same people who have created it. (The superego is part of the ego; the ego draws its energies from the id; the superego, in turn, is used to suppress id strivings.) If the person to whom the police force is sworn disappears by assuming a new identity (as is the case in fugue states), the police force becomes powerless and disbands.

Since the lack of cohesiveness in fugues is much more outspoken than in neuroses and since the reality testing function of the ego is better retained than in frank psychoses, the fugue state might be considered as "transitional between 'neurosis' and 'psychosis' ". One of the cases cited in this paper actually developed schizophrenia after having first been diagnosed as a genuine hysteria and then having suffered a severe attack of amnesia. It would appear that the fugue, in this case, was produced in a final effort to escape the psychosis by fleeing into a transient condition.

The rarity of fugue states which offer a relatively simple and very effective means to escape outside threats may be explained by the fact that the ego and superego cling to each other under almost any circumstances. The ego is prepared to take extreme punishment from the superego rather than give up the secondary narcissism for which it depends on it and, by surrendering the authority of its introjected parents, reduce itself to a state of utter infantile helplessness. "It seems that the sense of personal identity is to some extent dependent upon the evaluating, critical and ego-observing functions of the superego. At the same time the primary narcissistic libido clings tenaciously to its original investment, its love object, the ego itself."

Yet persons "with a predilection for the mechanism of isolation", as seen in compulsion neuroses, and with a weakened but still fairly intact ego may develop fugue states under special conditions. Characteristically, these conditions are often such that they cause in the individual a feeling of complete helplessness, or of frustration and disappointment with regard to authorities. The parental threat — the superego — loses its power because the individual feels let down by the parent representatives and in its anger decides that it is therefore justified to do what it really wants to.

The similarity between the behavior of the superego in fugue states and in compulsion neuroses is furthermore stressed by the great number of compulsive features in the psychological tests of the reported cases.

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B - Neuropsychiatry

A CRITIQUE OF PSYCHIATRY. ALAN GREGG, M. D., *American Journal of Psychiatry*, 101:285-291, No. 3, Nov., 1944.

Addressing the centenary meeting of the American Psychiatric Association in Philadelphia, Pa., (May 15-18, 1944) the speaker presented an outline and critique of psychiatry. He began with a review of the powerful determinants which have influenced and still influence the development of psychiatry.

No other specialty has had a history so strange and a relation to human thought so intimate as psychiatry. From time immemorial, the horror, which mental disease inspires has always been the historical heritage of psychiatry. So great has always been the fear of madness, that even the treatment of mental disease itself simulated madness. For centuries the insane were imprisoned, and when the confinement became kinder (asylums), the insane were still segregated from society, still feared and loathed.

No other specialty of medicine deals with diseases whose symptoms influence human relations so much and whose initial signs are so easily confused with moral lapses. A soldier in an early stage of a mental breakdown may be cuffed for cowardice or shot for desertion. Years passed before insanity was admitted as an explanation of homicide.

Another unhappy heritage of psychiatry is the tendency to think of the mind or spirit as being separate from body and therefore to consider some diseases as physical and others as mental. It will call for an immense effort in educating the laity to understanding the relation of psyche to soma. The assumption that body and mind are one will bring about a closer affiliation of psychiatry with the rest of medicine.

If one realized that man is always superstitious and irrationally conservative when he is beset by fear, then it is a wonder that medicine has ever emerged from the stage of witchcraft; that is even more remarkable in the case of psychiatry. But the battle is not yet fully won, for mental

diseases are still regarded with fear, aversion and ostracism. The centenary meeting, mindful of these past achievements, must also pay attention to present defects and future opportunities.

At the 50th anniversary of the Association, Dr. Silas Weir Mitchell made a similar inventory of the conditions then prevailing among psychiatrists. Some are not yet fully ameliorated. He referred to the geographical and intellectual isolation of the psychiatrist, to the multiplicity of non-medical duties of most medical superintendents, the dearth of nurses and attendants, the inadequate use of work as therapy, the lack of attention to the patients' needs at the time of return to ordinary life. That Dr. Mitchell in 1894 confined himself to the institutional aspects of the care of the insane shows that a significant change has come over psychiatry between the 50th and the 100th anniversary. For to-day psychiatry is practiced also in doctors' offices and in wards of general hospitals, schools and child guidance clinics; its range of interest has increased considerably.

Psychiatrists are badly prepared to take criticism. They are used to spending many working hours among their intellectually inferiors, occupying positions which are rarely exposed to criticism, and their authority is not commonly challenged. They possess intellectual subtlety, emotional imperturbability and professional serenity which is being exercised every day in walking through the wards.

Psychiatrists are badly recruited, for psychiatry has drawn from medical schools students who were not adjusted to the nature and urgency of the need, either in quantity or in quality. Able young men do not seek an aimless hospital routine, even if it is protected by isolation, not only in a geographical but also in an intellectual and emotional sense.

The only means of attracting and holding superior men in mental hospitals is the introduction of teaching and research to the wards of these hospitals. The number of applicants in any medical field increases in direct ratio to the opportuni-

ties for learning. Selective recruitment, and training of psychiatrists is of cardinal importance to any activity in this field.

Psychiatry is the most isolated specialty of medicine. As a natural consequence of their isolation, psychiatrists speak a dialect which is apt to produce resentment rather than comprehension on the part of their medical brethren.

Another consequence of their isolation is their provincialism with all its clanish distrust of outsiders. The unremitting association with patients of unbalanced and deteriorated minds, heighten the tendency toward isolation an individual psychiatrist may have had before. Thus the stage is set for "queer" attitudes and behavior on the part of the psychiatrist.

To counteract these tendencies, psychiatry should associate with other disciplines and take in its ranks recruits who are trained in more exact sciences, also men thoroughly grounded in psychology, who may become clinical psychiatrists. Sociology, and cultural anthropology as sciences which are concerned with the social relationships and conduct of man, must also not be ignored by psychiatry. Semantics, logic, metaphysics, genetics, rhetoric, history, mathematics,—all these disciplines can make valuable contributions to the extension of psychiatric studies.

Psychiatrists, especially those in institutional work and in military service are overburdened. The time allowed for psychiatric examination of draftees in this war was at first set at 3 minutes. It seems that psychiatrists have accepted this overload without adequate protest; for it is regrettable that they are so inarticulate. They deserve better spokesmen than those that have so far risen from their ranks. They should tell society that they are hopelessly overburdened and starved of adequate support and understanding by the public and authorities, and that their present resources are unequal to the demand. Why do so few people know that a third of the current cost of the State of New York is consumed by the care of psychiatric patients, and that more hospital beds are used for psychiatric patients in this country than for all the rest of medicine put together? Unless they insist to be heard,

they are derelict in their duty to patients, nurses and to themselves.

After these warnings the speaker turns to a more complimentary and encouraging side of the problem. So great a change has come over psychiatry in the last 50 years, that one might say with the psalmist: "The stone which the builders rejected, the same is become the headstone of the corner."

After years of neglect and derision, psychiatry is now being accepted as essential for the practice of medicine. Reforms are planned which place the instruction in psychiatry in every one of the students four training years. Even in the research of organic diseases their emotional and mental concomitants are stressed to an ever increasing degree. In the present war one third of all campaign casualties are reported to be psychiatric.

There were times when medicine capitulated so completely to the triumphs of bacteriology, chemotherapy and biochemistry, that it forgot the importance of the patient's make-up, his emotions and his human relations. In those days, the psychiatrist alone retained a comprehending attitude toward his patient. In our days, the role of the patient's psychological make-up has been fully recognized. Bodily changes, even changes in blood chemistry as results of emotions have been demonstrated. By these physiological discoveries, and to an even larger extent, by the discoveries of Sigmund Freud, the tremendous range and importance of psychopathology of every-day life has become abundantly clear.

What a story will be the full history of psychoanalysis in relation to the rest of psychiatry! It made the dreams, the fears, the phantasies, memories, attitudes, daydreams and free association of ideas the subject of its study, and directed our attention to the conflicts and strains which accompany the process of transformation of a completely dependent amoral infant into a socially adjusted adult. The emphasis on sex seems no more offensive or irrational than an evasion of this powerful biological phenomenon. On the other hand, one cannot escape the impression that psychoanalysts, as a rule, resent requests for proof, or experimental verification, of

their postulates. They also stress causation to a virtual exclusion of chance or correlation as factors explaining human conduct. Psychoanalysis seems sterile of success in orderly social cooperation, at least as far as one can judge from the chronic disharmonies prevailing among analysts.

Nevertheless, psychoanalysis has made a contribution to psychiatry that deserves more recognition in teaching psychiatry than it has received so far. At long last psychiatry has found recognition from the rest of medicine, which turns more and more to it for advice. How can psychiatrists meet this growing demand? Only if they raise their sights and extend their horizons.

In the same way that physiology and the causes of normal function were derived from the nature of disease, so also psychiatry by occupation with insanity has gained a clearer knowledge of the laws of normal function of the mind. The abnormal reveals the normal, just as the exception illustrates the rule. One of the tremendously significant contributions of psychoanalysis is the fact that it supplied concepts of human conduct, which like physiological laws, explain mechanisms operating in disease as well as in health.

The convergent rays of psychiatry, psychoanalysis and psychology flood the conduct of man with light as it has never before been illuminated. Psychiatry will find an even greater extension; it will find application not only to patients, but also to the relations of normal people, of races, classes and nations in government, in family life and education.

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INDUCTION PSYCHIATRY. A Review and Suggestions. MAJOR H. H. GOLDSTEIN AND CAPTAIN W. ROTTSMAN, U. S. A. *The American Journal of Psychiatry*, 101: 210-215, No. 2, Sept., 1944.

This paper presents a summary of the authors' experiences gained in approximately three years of working as psychia-

trists at induction stations, and their suggestions for possible improvements in the procedure.

At the various committee meetings held to discuss the best method of selecting men for military service, the psychiatrists saw themselves faced with the task of determining the ability of the inductees to adjust themselves to army life and of evaluating their personalities in this light.

With regard to the technique of the psychiatric examination, the following recommendations were generally accepted: (1) The psychiatrist should be the last of the specialists to examine the selectee; (2) The examination should take place in a private room. (3) The records obtained by other examiners should be at the psychiatrist's disposal. (4) Interrogation of the inductee should be conducted on the basis of certain key questions the answers to which would determine whether any psychopathological traits existed in the man. Further questioning would then reveal the actual syndrome. Among the standard questions universally employed were inquiries after the man's health, his progress in school, his marital status, his work, etc.

Recommendations with regard to neurological examinations included such basic tests as reflexes, pupils, gait, etc.

While it was unanimously agreed upon that the number of men to be examined by way of the psychiatric interview should range between 50 and 75, there was some diversity of opinion as to the desirable length of the examination. Generally, 5 to 15 minutes per patient were suggested.

There was considerable variation in the rejection rates. A pre-war study made by Aita at Ft. Snelling indicated that mental deficiency was by far the most frequent cause for rejection, with neurological conditions and psychoneuroses being next. Generally, however, the statistics with regard to rejectable causes were extremely unreliable and often superficial.

Consideration was also given to the strain imposed upon the psychiatrist through the monotony of induction work and the subsequent decrease in his efficiency. Another important factor appeared to be the great differences in the backgrounds

of the psychiatrists and the resultant variation in their ability to size up the individual within a short period of time. It was noted "that there was as much need to examine the examiner as there was to examine the examinee."

The most desirable method of determining and eliminating mental defectives appeared to consist in the combination of clinical judgment and literacy tests. Most of the various short psychological tests were regarded as impractical for one reason or another. Some induction stations enlisted the aid of a psychologist for more thorough testing.

At first, the criteria necessary for the rejection of an inductee were mostly expressed in generalized terms and it was, therefore, left to the psychiatrists to interpret them in accordance with their individual experience. The various psychiatrists made up their own groupings of symptoms and signs which they considered as determining factors in judging mental fitness but omitted to express their ideas in terms exact enough for the use of less experienced examiners.

Another problem which the induction psychiatrist had to face was that of procuring information about the inductee. Only a few induction centers, mostly those in large cities, were able to provide reports from schools, social service agencies, etc., which gave some clue as to the personal history of the inductee. Generally, the reports received from draft boards were negative, indicating that the draftee was simulating and that, to the knowledge of the board members, there was nothing wrong with him.

There were naturally considerable differences in the lengths and methods of the psychiatric as well as neurological examinations in various localities, depending upon the number and the quality of the examiners available.

As was mentioned above, the quality of the individual psychiatrists varied greatly. Among the determining factors were: the attitude assumed towards psychiatric problems by the induction station officers and the chief medical examiner; the way the community and the different draft boards reacted towards a selectee who was rejected for psychiatric reasons; and,

finally, the ability of the psychiatrist to withstand the monotony of his work while at the same time other men (who were taken into service much later) were put into far more interesting and promising positions.

In making the following suggestions the authors point out that they are aware of the technical problems involved but feel "that such administrative difficulties as do exist would be well worth overcoming to bring about an increased efficiency in induction station psychiatry."

1. A training period should be instituted during which psychiatrists expecting induction station work should get used to the rapid evaluation of the individual with regard to rejectable causes.
2. Through the wider utilization of private psychiatrists a sufficient number of examiners could be assigned to each station thus accomplishing a more or less even distribution of the number of men to be examined by each psychiatrist.
3. Periodical examinations of the psychiatrists should be made in order to ascertain that no fundamental change in their viewpoint regarding reasons for rejection has taken place.
4. Wherever possible an exchange between induction psychiatrists and personnel employed at nearby hospitals should be arranged for at regular intervals.
5. Since the extent to which a community can cooperate with the psychiatrist by supplying him with informative material about the selectee, is naturally subject to considerable variation, it is suggested that a central agency develop a scheme for communities lacking the necessary facilities through which such information could be procured.
6. The information obtained from schools, social agencies, etc., would aid in the discovery of men suffering from psychopathic personality or from mental deficiency.

7. Rejections should also be made upon the following bases: (a) A psychiatric questionnaire, containing questions about the draftee's health, his nervous condition, the frequency of his consultations with physicians, his family background with regard to mental illness, possible former discharge from military service, a history with

regard to spells of unconsciousness and fits, etc. (A questionnaire of this kind, the questions to be answered with "yes" or "no" has been used successfully at the Ft. McPherson Induction Station.) (b) Rorschach group screening test. In this test an ink blot permitting ten possible interpretations is thrown onto a screen enabling a large number of people to participate. (c) Minnesota multiphasic personality test in its original or a modified form. This involves the answering of 504 questions with either "true," "false" or "cannot say." The questions are numbered, formulated in simple language and written on a series of slides which are projected on a screen. (d) Organic disease questionnaire, containing questions about all the disorders stated in "MR 1-9." These questions would have to be answered with yes or no and should be formulated in a manner easily understood by the selectee. (e) Psychiatric interview.

8. The questionnaires would be classified by a number of servicemen with regard to their rejectability. The following criteria would form the bases for rejection:

A. Epileptics, psychopaths, and most other "negative malingerers" would be discovered by comparing their excellent questionnaire responses with the poor Rorschach test results.

B. Mental cases would be eliminated upon: (a) social service reports indicating hospitalization, a positive psychiatric report, etc.; (b) doubtful Rorschach and multiphasic personality test as well as positive questionnaire in addition to the positive social service report; (c) suspicious Rorschach score, positive questionnaire and confirmatory psychiatric interview; (d) very suspicious Rorschach without a confirmatory interview.

C. Psychoneurotics would be rejected on the following basis: (a) positive social service records with regard to social and medical history; (b) positive psychiatric interview as well as doubtful or positive Rorschach and multiphasic personality tests plus positive social service information; (c) positive Rorschach plus confirmatory interview.

D. The following findings would determine the rejection of psychopathic per-

sonality: (a) very positive social service report; (b) a positive questionnaire in addition to a suspicious or positive Rorschach and multiphasic personality test and psychiatric interview.

The authors believe that their program would bring about the following improvements:

"1. A rapid index of evaluation of possible psychiatric disabilities could be established with comparable criteria for rejections being laid down for each station.

"2. Even in the absence of sufficient help, excellent screening could be accomplished.

"3. Statistical evaluations would be enhanced by establishment of criteria for rejections applicable to all stations.

"4. The entire method possible of accomplishment with little increase in personnel and a short increase in time.

"5. The method is suggested as a routine procedure for examining all men for overseas service and as a screening examination in demobilization.

"6. Marked improvement in the examination for organic defects would result with a decrease in the number of physical rejectables being accepted.

"7. A more thorough evaluation of the total physical and mental status would be possible.

"8. The objectivity of the cause for rejections would lead to a better acceptance of psychiatric rejections by draft boards and public."

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PSYCHOLOGICAL DIFFERENTIATION OF PSYCHOPATHOLOGICAL DISORDERS. RUDOLF DREIKURS, M. D., *Individual Psychology Bulletin*, 4:35-48, Second Quarter 1944-45.

The author gives a very instructive survey of the differentiation of psychopathological disorders from the standpoint of individual psychology. He emphasizes the importance of Adler's views for the

understanding of psychopathology. Defects in "social interests," a faulty "life style" and "discouragement" are the points he stresses. The distinction between neurosis and psychosis is not a question of degree. The degree of disturbance is not dependent upon the quality of the disorder; thus psychotic cases may cause a slight disturbance while neurotic conditions may lead the patient into complete invalidism. The difference between psychosis and neurosis is structural.

The author then discusses the psychological difficulties resulting from the individual's inability to integrate into the community and the conflicts obstructing his social participation. "The nature of the social conflict and the attitude of the individual to his own social maladjustment distinguish the various types of psychiatric disorders." The severity of the individual case is dependent upon the degree of discouragement, inferiority feeling, and social antagonism of the patient. The therapist leads the patient out of his inferiority complex and helps him change his faulty life style which has been based on a "wrong interpretation of the logic of living together."

While Freud described the superego as the instance of social values which come in conflict with the primordial urges of the ego, Dreikurs formulates the term "common sense" as contrasting to the term "private sense." Common sense, (C. S.) is defined as "our thinking in common, our participation in general ideas, in values and morals accepted by the whole group to which we belong." In contrast to this, stands the desire of the individual to follow his specific interests, his "private sense," (P. S.) which according to Adler, often conflicts with the general rules of understanding. The patient's private goals, his life style, his interpretation of his own needs interfere with his willingness to adjust himself to social demands.

The neurotic person meets this conflict by hiding his P. S. from his consciousness, his conscience, his C. S. He looks for excuses for his social shortcomings. Symptoms offer a useful alibi in this respect.

Psychotics have similar conflicts to adjust. However, their solution is different. Inferiority of the central nervous system,

infection, exhaustion, toxic agents or organic brain lesions may offer suitable conditions for the patient's attempt to solve his conflicts by obstructing his recognition of the C. S. Through delusions and hallucinations he may offer to himself an assumed reality which conforms with his P. S. Then he lives in a world of his own in which his personal goal appears justified.

The psychopathic personality, according to Dreikurs, is a person who "deviates in his actions from the logic of living together, from the social obligations to which he is exposed. However, unlike the neurotic, he has no inner conflict. He has failed to develop sufficient common sense." He needs no alibis, since he does not accept the values and morals of others.

Only the neurotic has real insight. The psychotic suffers from what he believes to be reality, the psychopath suffers from society itself.

The diagnosis of a neurosis must be made on the basis of its psychological structure, independent of the existence of any organic condition. Organic symptoms may be used for neurotic purposes, as alibis for non-participation in life, or as an excuse for failure. It is important to recognize the inner purpose for which a neurosis is used by the patient.

Nervous symptoms develop when the patient's life difficulties begin, and when the discouraged individual decides that the social problems he is to face are too difficult for him. He then withdraws from some particular life task, from love or marriage. The patient's subjective interpretation of the specific situation proves to be inadequate. If a patient is asked what he would do or how his life would change if he were well, he invariably reveals the direction of his neurosis. "I would get married," or "I would get a job," are some of the characteristic answers. They show the excuse the patient needs for his failure in work, sex or social life, for his desire to avoid responsibility.

The neurosis is a human creation formed according to the image of a disease. Two factors are required for this process: (1) a psychic tension created by apprehension in regard to some life task; (2) a desire to overcome the disturbance which creates symptoms. The latter can

develop only *against* the conscious intentions of the patient. Indeed some symptoms disappear if the patient attempts to produce them deliberately.

Dreikurs divides neurotic symptoms into disturbances of (a) feeling, (b) thinking, (c) bodily functions.

In the first category fear holds the first place. "Fear is the basis of the neurotic attitude toward life." To the disturbance of thinking belong obsessions and compulsions, jealousy (?), disturbances of memory and concentration. The third group comprises what is generally known as conversion hysteria, neurasthenia and organ neurosis. The "choice of organ" is based on a lowered resistance of a specific organ to the strains of life. But "every symptom presents the best and most effective answer a person has found in regard to his psychological needs." The patient is not aware of all this, and only psychotherapy can acquaint him with these conditions and help him on the way to a proper participation in life.

In psychosis "the defensiveness against life is complete." Psychosis is no longer directed against a life situation but "against social life altogether." While psychotic mechanisms are not alien to the normal individual, they do not, as a rule, affect our waking life but appear only in our dreams. There the individual is removed from the social atmosphere and its logic and establishes temporarily, its own private atmosphere and logic. In the depressive psychosis the antagonistic attitude of the patient involves the whole world. Even his feelings of remorse are used as weapons for attacking social responsibilities. The patient follows his P. S. at the expense of the C. S. The manic phase is the overcompensation of the feeling of complete defeat. In paranoia the patient puts himself in the center of the world. The intimidated and defensive individual exists no more; he is an object of general attention. In organic psychoses the somatic disturbance often proves a tool which is used for pathological reactions. The same pathological agent, alcohol for instance, may lead to different manifestations (neurotic or psychotic) in different individuals.

Dreikurs is inclined to consider the mentally deficient as belonging to the

group of psychopathic personalities. He believes that "retarded children instead of recovering the necessary better care, receive less of it and are therefore prone to become psychopathic personalities." Psychopathy is due to deficiencies and failure of the responsible persons in fulfilling their educational obligations. In psychopaths the C. S. of the patient is "identical with the ideals and values of those to whom he feels he belongs. But it ends there also." Similar conditions prevail in criminality. Criminals are psychopathic personalities, their C. S. is at variance with the social order around them. All psychopaths have as a common trait "their limited acceptance of what is right and wrong. As they do not feel sick and as they feel justified in their own behavior, they seek no help and accept no therapy. Prevention is the best cure. Once the psychopathic personality has been developed, only group therapy appears to be of value. While the patient may resist to a personal therapy, he may respond to a group spirit. But in any event, new group values must be developed to increase the social values of the psychopathic individual.

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PERSISTENT ENURESIS IN ADULTS. MORTON L. WADSWORTH. *American Journal of Orthopsychiatry*. 14: 313-320, No. 2, April 1944.

This study includes a hundred enuretic men, ranging in age from 21 to 43, who appeared at an army induction center. In these malingering and organic factors, including epilepsy, were ruled out. Brief personality sketches were compiled for each man.

The author cites five typical cases in some detail. Of the hundred cases, 90 were psychoneurotic; in 88 of these symptoms of anxiety state predominated; the other two showed psychasthenic and neurasthenic symptoms. Two men were of low intellectual endowment; three of an

immature personality and one of a psychopathic personality. The average age incidence was between 20 and 30 years; twelve were over 30 and one over 40. In the great majority, the enuresis seemed to be a part of an anxiety pattern.

The childhood histories of these men emphasized harsh, unsympathetic attitudes on the part of parents. As children the men were fearful, giving a history also of nightmares and night terrors. Their childhood fantasies suggested guilt feelings and the need for punishment. As a rule school progress was poor and lacked the normal aggressiveness. The usual treatment received was medicine for "weak kidneys." In addition to their enuresis, there was also urinary frequency. No organic basis was found for the frequency; it was considered psychogenic, as is usually the "irritable bladder" of soldiers.

The author's findings are similar to those of Dr. Margaret Gerard who made a psychoanalytic study of enuretic children. The personality development of the majority of the adult enuretics is characterized by a great amount of anxiety and a suppression of aggressive drives. The fearful little boys grow up to be weak ineffectual men.

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ON THE ORIGIN OF NEUROSIS. WILLIAM V. SILVERBERG. *Psychiatry*, 7:111-120, No. 2, May, 1944.

Frustration of the sexual instinct was declared by Freud to be the universal basis of neurosis. Fulfillment of frustration of sex are crucial for men's adjustment to life. The Oedipus complex is the motif and pattern of all human behavior.

In Freud's conception, sex is not a static quality but a process of development of an organic energy called libido, which passes through various stages and reaches its climax in the genital behavior. Frustration on any of these stages can be responsible for the outbreak of a neurosis.

The difficulty Freud had in putting his

theories into a system seems to the author to justify a certain degree of scepticism. Silverburg doubts whether the so-called pregenital stages are really evolutionary phases of sexuality. He thinks that sensual pleasures on any of these stages need not be synonymous with sex. Likewise here is no conclusive proof that the various erogenous zones assume primacy in an orderly evolutionary course; they seem to operate simultaneously at all stages. With this conception the author comes close to the criticism of the libido theory offered by Stekel two decades ago. (*Psychosexual Infantilism*, 1922.) If in infancy oral function is of prime biological importance, this does not prove that it is also of prime psychological importance.

The writer is of the opinion that the preoccupation with defecation a child displays at a later stage of development is caused by environmental influences during toilet training, and does not prove the existence of a specific "anal" stage.

The author therefore thinks that Freud's "monistic" theory cannot be maintained and should be replaced by a "pluralistic" one.

Neuroses have varied backgrounds. One of the causes of neurosis is aggression that has been thwarted in the individual's early childhood. Effective aggression is defined as the capacity for doing *what* one wants to do, *when* one wants to do it. The subjective feeling accompanying this process is called the feeling of competence or adequacy.

No child grows up with its feeling of competence intact, because in preparing him for the civilized life his environment, in many instances, must check his aggression. The child's first immediate reaction to the restricting influences is rage, which, because of its instinctive character cannot be considered as pathological; it is rather an act of aggression which also may be, and usually is, frustrated by the threat of punishment.

As a child gets older, secondary reactions to the state of frustration of aggressions set in. These are, either (1) renunciation of the aim, that is acceptance of frustration as inevitable, or (2) persistence in pursuing the goal in other more devious

ways. The behavior of the parents and the degree of their vigilance and strictness are the factors deciding in individual cases, which of the two ways is chosen by the child.

If renunciation is limited to those areas where restraint is required by the exigences of social living, then this renunciation may be beneficial rather than harmful. If, however, renunciation occurs over too wide an area, then the spirit of the child may be broken, the child's feeling of competence may be lost irrevocably, and his capacity for effective aggression may be hopelessly vitiated. Such an individual can do nothing on his own initiative, but only under the leadership of other persons; and a lack of approval may prove to be paralyzing to all his activity.

Those, however, who persist in pursuing their goal by devious ways, comprise various types in accordance with the prevalence of their specific tendency to persist or to rebel. They may invent deceptive means which later may evolve in criminal behavior or they may outwardly conform and inwardly rebel; may appear docile and well behaved but apt to be fearsome, to react with phobias and compulsions. They may develop a profound ambivalence towards their environment, and be always in conflict as to whether to obey or to rebel. If thwarting of aggression goes too far, it may cause also difficulties in the sexual sphere, such as impotence and frigidity; these disorders may develop independently from and preceding the Oedipus situation.

The author then applies his theory to the concept of penis envy. Whereas Freud assumes that the girl's feeling of inferiority is based on her recognition of her anatomical defect, other authors point out, that the girl is already convinced of the boy's superior capacity to do things, long before she discovers the anatomical differences. After this discovery is made she conceives of the penis as urinary, not a sexual organ; she thinks of it as of a means by which the boy can direct the urinary stream against anything—a form of aggression—which nature has completely denied to her.

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THE SOCIAL ANXIETY NEUROSIS — ITS POSSIBLE RELATIONSHIP TO SCHIZOPHRENIA.
ABRAHAM MYERSON. *The American Journal of Psychiatry*, 101:149-156, No. 2, Sept. 1944.

Excitement is the reaction of the consciousness to the manifold stimuli to which the human being is subjected. The degree of excitement is dependent upon how "meaningful" the stimulation is and how it affects the voluntary and involuntary muscles. While excitement, particularly in the form it is sought for by the public may be a source of pleasure, it may also become most unpleasant and even terrifying if it results in the persistent penetration of the consciousness by visceral activity, as for example, the beating of the heart, the act of breathing, etc.

Ordinarily, the viscera are controlled by a "silencing mechanism" which prevents their activities from becoming part of the consciousness. If this mechanism is impaired, the resultant awareness of the visceral functions may cause anxiety. To a large degree, the author notes, the "anxiety neurosis" is an over-response of the organism to stimulation; as a result of this, or accompanying it, the silencing mechanism disappears so that the functions of the viscera come to the individual's attention; a mal-functioning of the viscera follows: the heart-beat becomes too rapid, the bladder urgently demands too frequent emptying, the gastro-intestinal tract manifests its disordered functioning by nausea, vomiting, diarrhoea or spasms.

The "social neurosis" manifests itself in a negative and adverse attitude towards fellow human beings; it may therefore be regarded as a form of anxiety neurosis, particularly since it presents psychosomatic symptoms, identical with those found in all other anxiety states. The origin of these symptoms, in the case of the social neurosis, is to be sought in the patient's social life and the conflicts emanating therefrom. The visceral disturbances may appear upon contact with other persons, but also in anticipation of meeting people. They eventually become the focus of the patient's attention and may induce him to consult a physician.

While there are people for whom the

successful establishment and pursuit of social relationships is a matter of course and who more or less automatically reveal or conceal as much of themselves as they see fit, there are other, less fortunate ones, who are unable to subject themselves to the scrutiny associated with social life, without the most painful embarrassment. They are unable to maintain a conversation, to behave with their natural ease, and finally, as consequence of their anxiety, develop somatic disorders of either a general or specific nature.

In its early stages, the social neurosis manifests itself in timidity and self-consciousness. There is nothing extraordinary about the fact that a self-conscious child flushes at the least provocation; as he grows older and more understanding of his own value and others the flushes will appear only on rare occasions. If, however, he is unable to reach that stage of self-confidence in which he can face the scrutiny of others without doubting his worth and without losing his natural ease and self-assuredness, he will flush constantly until not only he himself but also other persons become aware of it. Finally, the patient's anxiety of the situation itself is equalled by the one he feels of his own reaction.

Generally, human beings react with a specific set of organs to situations causing them anxiety. The organism most frequently affected is the gastro-intestinal tract. The patient then suffers not only from his apprehension at meeting other people but also from the fear of behaving himself in a socially unacceptable manner. Another set of symptoms to be observed in cases of social neurosis are urinary disturbances which may either manifest themselves in a frequent urge to evacuate the bladder or in a difficulty to urinate, particularly in the presence of others. This latter symptom applies especially to men. In some cases of social neurosis the patient becomes painfully conscious of the activity of his heart. He will be frightened by the rapidity of its beat and develop a fear of fainting or even dying. In addition, he is terrified by the thought that this physical defect will make him socially conspicuous and will exhibit tremor, violent perspira-

tion or even orgasmic responses if he has to enter into social contact.

Further symptoms of the social neurosis are the inability to master the so-called art of conversation (this is connected with a sensation akin to stage fright) and a constant fear of offending other people coupled with the urge to please everybody at any price, even at the price of oneself being hurt.

Certain phases in the evolution of social neurosis appear to bear considerable resemblance to certain symptoms observed in schizophrenic cases. One such trait is the patient's belief that people "become adversely affected" by him, for example by an odor that emanates from the lower end of his gastro-intestinal tract, and which causes them to assume disgusted or hostile attitudes toward him. Another symptom related to schizophrenia is the patient's opinion that people are deliberately exerting an adverse influence upon him thus causing him to flush, to suffer gastro-intestinal disturbances, etc. Moreover, case histories of schizophrenics show that many of them, in their early life, suffered psychosomatic disturbances, particularly in the presence of others or if they were confronted with a situation they found it hard to deal with.

Myerson emphasizes that he is fully aware of the fact that the attempt to establish a relationship between schizophrenia and social neurosis is a "hazardous undertaking." He points out, however, that the passivity encountered in the catatonic stages of schizophrenia as well as the resistance shown by the mental patient towards the examiner are "social reactions" which disappear or improve if the individual is unobserved or placed under more adequate conditions. Other social reactions, though defective ones, are the limp handshake of the person suffering from dementia praecox and the averted eyes and face (indicating the "fear of others") of the schizophrenic.

The author then proceeds to cite various cases which would support the above theory. One of them concerns a young man whose mother is in a State Hospital suffering from a paranoid psychosis accompanied by a number of symptoms suggesting dementia. The patient has an early

history of marked self-consciousness, a feeling of discomfort, difficulty of communicating, and psychosomatic disturbances in the presence of others. These manifest themselves in an inability to urinate in the presence of others and are the foundation for an anticipation anxiety which expresses itself in timidity and serious attacks of hypochondriacal reactions. The patient's sex life shows a difficult development but has finally become adjusted through a successful marriage. Another group of symptoms exhibited by this patient shows paranoic characteristics coupled with referential delusions. These symptoms appear temporarily. The patient's reaction to one of his superiors may be considered typical for this symptom complex. He was completely powerless in the presence of this supervisor and felt that he was being influenced by him. On numerous occasions he gave vent to his hostility as well as to his ideas of persecution and reference. After he left this position, he started to work in a post office. He was well able to work as long as he was left to himself but was completely incapable to go on when he felt that he was being observed. Moreover, he gained the impression that people were laughing at him and making derogatory remarks about him. There were periods of improvement during which his sense of self-consciousness as well as an obvious flushing and sweating would be reduced. These improvements were especially noted for a short period after he was married, but later the symptoms reappeared making it impossible for him to continue regularly on his job. Every time he has to return to his work, the difficulty increases and the ideas of reference and persecution increase in frequency.

The author expresses the opinion that the development of individuality which has its origin in the privacy of the home may be an important contributing factor to the development of the social neurosis. He believes that neither social neurosis nor schizophrenia or any other anxiety states can be regarded as having a "purely psychological" basis. Since gregariousness is as natural an instinct as sex, there remains little doubt that it also must have physiological foundations. It appears that "so-

cial adaptability and social ease are part of a general human fitness made up of many parts, out of which the whole of social activity emerges, and that deficiency in any one of the parts may lead to maladaptation, lack of ease or pleasure in social relationship, and failure of adjustment."

Naturally, the normal social reactions of the individual are largely dependent upon his early surrounding, schools, training, etc. Individuals who under different circumstances may develop a perfectly acceptable social behavior, may be overpowered by the pressure exerted upon them through the competitive nature of life.

Meyerson notes that the social neurosis is almost identical with Alfred Adler's "inferiority complex." However, Adler seeks the origin of the inferiority complex in the unconscious protest against organ inferiorities. Meyerson does not regard the psychopathology as the result of an abnormal reaction to the stimulation of social relationships. But the evolution of the social neurosis presents itself as (1) an inferiority reaction; (2) anticipation anxiety; (3) a specific reaction, often accompanied by psychosomatic disturbances, to the social situation, and only (4) and finally, the inferiority complex based upon the individual's feeling of inability to handle a situation connected with the exposure to the scrutiny of others.

In conclusion, the author emphasizes his scepticism with regard to "the dynamic interpretations of the psychopathological type" and stresses that his opinion is based exclusively upon the factual history of his cases.

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INTERPRETATION OF WAYWARDNESS. CURT BONDY. *Journal of Criminal Law and Criminology*. 36:3-10, May-June, 1945.

Waywardness is the underlying psychic state of mind of many criminals, delinquents, and neurotics. We must not be satisfied merely to consider the symptoms of waywardness, but must try to under-

stand and interpret certain fundamental psychologic elements in the individual makeup. Waywardness is the psychic state of personality we find in people who become unstable, neurotic, delinquent, and criminal.

An hypothesis is presented based on the psychology of Plato and Freud. The former compared the layers of the soul to the layers of the state, thus we have rulers-reasons, guardians or warriors-passions, common people-appetites. Plato also emphasized the unity of personality. Hence he established these principles: (1) "Every one of the three layers has its definite rights and duties, must find its own satisfaction, but may not overstep its boundaries. It must be especially observed that the drives, which are stronger and stronger excitement, must stay within their established bounds. (2) The three layers of the soul must be brought into harmonious personality. (3) The reasons should govern the whole life. To what extent the passions and appetites may be satisfied, how the total psychic energy is to be distributed among the various layers, is to be determined by the reasons."

Freud's theory can be combined with Plato's. The former's concept of the importance of the unconscious is most significant in modern psychology. This concept can be combined with Plato's idea of the layers. A diagonal line may be drawn through the "Reason, passions, and appetites" layers. A shaded portion would be the unconscious, and the light portion the conscious, areas. Just where and how the diagonal line would run for an individual depends on his personality and especially his degree of consciousness. For a wayward, it is typical that; (1) his actions are not directed by the reasons, and, (2) a relatively larger part of the total psychic energy at his disposal is devoted to the satisfaction of the lower layers. In applying this hypothesis to the theory of waywardness we would find that the wayward

has a reduction in his reasoning area as well as in the passions with a compensatory increase in the appetites. Thus, the relationship of energy is upset in the waywards because the lower layers use more energy and the higher are deprived proportionately. So far the writer has not known an absolutely wayward person. Therein lies the hope of the educator, that there is something in the higher layers of everyman which can be used in the work of re-education.

There is no inborn inherited waywardness, just as there is no inborn inherited criminality. There are only a multitude of inherited and environmental influences that may or may not cause waywardness or criminality. In Aichhorn's "Wayward Youth" we find a theory waywardness built on Freud's psychoanalysis. The book shows us how often the reasons for waywardness are completely in the unconscious and also how they can be brought into the conscious. The book shows that a great many of the reasons for waywardness are entirely unknown to the victims themselves. Again, in Freud and Burlingham's "War and Children" we find that "whenever certain essential needs are not fulfilled, lasting psychological malformations will be the consequence. These essential elements are: the need for personal attachment, for emotional stability, and for permanency of educational influence."

Two important conclusions are drawn: we must try to conduct more of the psychic energy to the higher layers by finding new interests, new aims and ideas, and by arousing the ambition and pride of the wayward, and, second, the wayward has to be helped to become as conscious as possible, preferably to a higher degree of consciousness than the normal people of his group.

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C - Clinical Psychology

EXPERIMENTAL NEUROSES AND GROUP AGGRESSION. JULES MASSERMAN. *American Journal of Orthopsychiatry*, 14: 636-643. No. 4. October 1944.

In order to test psychiatric and psychoanalytic principles based on clinical observations alone, the author has been studying the behavior of animals by experimental techniques. In 1943 he described in detail the previous results of these experiments. Briefly, they are as follows:

Motivation: The behavior of an organism by is physiological needs, such as warmth, specific food, relief from sexual tension, etc.

Meaning-reactions: The animal's behavior depends on its interpretation of its environment as determined by its individual perceptive reactive capacities and its special fields of previous experiences. The behavior ranges from simple conditioning of the lower organisms to the abstract ideational processes, symbolic expressions, and the intricate social conformities of man.

Dynamics of "Neurosis": When an animal's motivation in a given situation becomes conflicting, the resultant behavior is inhibited, vacillating, inefficient, unadaptive to "objective" reality, and excessively substitutive in the given or symbolically related situations.

Experimental Neuroses were produced on cats who were trained in an automatic experimental cage to lift the lid of a food-box in response to a given bell-light signal. The above principles were tested in two hundred animals and the results checked by control observations and dynamic analysis. The animals were subjected to various traumatic stimulations involving hunger and fear resulting in somatic and visceral manifestations of anxiety. The "neurotic" symptoms persisted for months unless treated either by bromides, barbiturates or alcohol; or by forced feeding to alleviate the hunger drive, or by placing a given animal with one which reacted normally; or by patient retraining of the animal to the signal-feeding response in

the cage; or by teaching the animal to control the conflicting situation.

The results of these experiments suggested the problem of how would the experimental neurosis affect the behavior of an animal placed in a situation of controlled competition with other animals. The author described in detail the experiments with thirty-four cats trained in feeding-response and who were placed in experimental cages in groups of two and four and allowed to compete for food. The "social" behaviors were studied.

It is evident from the experimental observations that when an animal meets a configuration of perceptual stimuli, it reacts with a series of behavior patterns depending on its current motivations and on its previous experiences with related perceptive sets. Since the experience and motivation are continually changing the meaning of the environment may change within a short time. That is, a cat can be trained to manipulate a switch which turns on a light signal or even a mild electric shock of these stimuli have customarily been used as feeding signals, yet if the switch suddenly releases an unexpected air-blast, one observes severe disturbances in behavior. The cage, switch, light signal may one day mean food to the animal and lead to normal behavior; but the next day, the same set of stimuli may bring about a situation of motivational conflict resulting in abnormal reaction suggestive of a "neurotic" pattern. "Meaning" is not inherent and fixed in any set of stimuli, but dependent on previous experiences and current attitudes.

In these experiments on cats the results show that dominance does not depend on the sex, weight, age or the family relationships of mature animals, but instead the dominance hierarchy depends upon the individual's interest in its goal. Like other group phenomena, dominance need not be a direct relationship between the organisms in the group, but between the animal, its motivational goal and inanimate or animate obstacles to its goal.

Overt aggression appears in animals

not as the expression of some basic drive, but either displaced from group dominance or frustrated by external obstacles to produce motivation tensions. These aggressive expressions subside when dominance is restored, the neurotic conflict resolved or adjusted to.

These observations on the cats may be helpful in the study of psychodynamics of the individual and social human inter-relationships.

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HAZARDS OF THE HIGH I. Q. DOUGLAS A. THOM AND NANCY NEWELL. *Mental Hygiene*, 29:61-78. No. 1. January 1945.

The authors report on forty-three boys and girls of superior intelligence (I. Q. above 130) first seen in child guidance clinics in Massachusetts from 1927 to 1934. The average interval of follow-up tests was eleven years.

The statistics showed that superior ability creates problems of its own. Very little recognition has been given to the fact that extremely high intelligence is as far from normal as is mental deficiency. The range of normal intelligence runs from the dull borderline mentality at 70 I. Q. to the very superior level of 130 I. Q., while the average I. Q. of children at given age levels is 100 I. Q. The children were brought to the clinics by their parents, who sought advice on account of educational difficulties at home.

Thirty-eight of forty-three children were available for re-examination. Tests were selected which corresponded as closely as possible to the original Stanford-Binet (1916 revision), which had been given when the children's age was from 2 to 10 years. At the time of the second test the youngsters were from 10 to 20 years of age. The average for the group was 135 I. Q. on the Stanford-Binet (1937 revision) and 125 I. Q. on the Wechsler Bellevue test. The statistical comparison

of the results of the first and second examinations was presented graphically. The authors found that the original ratings remained generally the same.

The educational background of the parents of the high I. Q. children was generally a moderate one. The economic situation at home varied from moderate degrees of both economic security and economic stress. Only some children had outstanding descendants as to culture and economic background. Unfavorable tendencies as to environment and inheritance occurred in 17 families: neurotic, unstable, alcoholic and delinquent descendants. Furthermore, there were 3 cases of mental disease.

Of the 43 children with high I. Q. fifteen were left-handed or ambidextrous, 4 had speech difficulties, 6 had extremely poor handwriting, and 12 were of poor vision. The personality problems for which the children originally attended the clinic were chiefly the normal childhood problems in connection with eating, sleeping, elimination and discipline. The staff of the clinic discussed with the parents the educational problems. It was the task of the clinic to draw the parents' attention to the fact that the social adjustment of these highly intelligent children was especially difficult, and to give advice how to handle those resulting difficulties by beneficial guidance, unity of aims and sharing of interests. The follow-up studies after an interval of eleven years showed that about half of the children had adjusted well and made the most of their abilities. In 14 cases home conditions were harmonious; the parents profited by the advice of the clinic in avoiding the interference of relatives, in adopting less emotional attitudes toward childish self-assertion etc. 34 children had received high marks in school, 19 had been honor students and 9 had won awards, varying from prizes to college-scholarships. 16 had graduated from high school, 3 from vocational schools and 4 from colleges. Of 20 pupils remaining in school, 14 were a year or more advanced in grade placement.

In 7 other successful cases home conditions were not ideal; but these children were able to develop their abilities and

adjustment by their own initiative, by getting more and more independent of family-influences. In some cases of the older ones the detachment from the parental home, where friction and antagonism prevailed, helped them to go deliberately into military service or junior colleges where they succeeded remarkably well due to their own abilities.

22 cases were less successful in finding adjustment and happiness. Great nervous instability among parents or grandparents might have affected these children by inheritance or association. Dominating parents, tyrannical siblings inhibited the development of personality of those children. The youngsters reacted with fear and failure or developed a great deal of antagonism towards selfish or too ambitious parents. Corporal punishment, indifference, overprotection, unjust treatment, favoritism for one child, etc., crippled the capacities of the children in spite of their superior intelligence. Some cases described by the authors showed an absolutely arrested development of the children, although their I. Q. remained high in the follow-up test. The children reacted to the false standards and the emotional instability of their parents with such an antagonism that they accepted even uncongenial work in factories.

Conclusively the authors' findings were the following: The consistency of the follow-up tests indicated that the early psychological tests were reliable and predictive as to the continuing ability. Success or failure of the child did not depend on his superior I. Q., but upon environmental factors, inherited properties and qualities of the child. Probably the most definite contribution to success was consistent and reasonable training in the very early years.

The authors emphasize that public schools cannot offer adequate guidance to the superior group of children. Many gifted minds are unrecognized and lost in the uniformity of the school system. Economic advantages at home do not influence the success or failure of the children, while a happy and harmonious home life, combined with understanding and reasonable training of the children is a great contribution to the development of the

youngsters. A closer relationship of schools with social and clinical service for the purpose of relieving emotional pressure and of helping individual children to overcome their difficulties, is an aspect of the future. Otherwise, the authors emphasize, unusual abilities go to waste, instead of being transformed into superior leadership qualities.

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PROJECTION AND THE DESIGN OF PROJECTIVE TESTS OF PERSONALITY. RAYMOND B. CATTELL. *Character and Personality* 12:177-194, March 1944.

Dynamic projection measurements were developed simultaneously and independently by Murray and Sears in the United States and Cattell in Britain. The result has been a greater use of projective tests by clinicians as opposed to the unimaginative questionnaire technique. The term "dynamic projection" as used by Cattell differentiates between the projection test development and the Rorschach "which came earlier but which was not deliberately planned on an hypothesis to test the psychoanalytic mechanism of dynamic projection, and which has concerned itself with a mixture of intelligence, temperament, etc., whereas, "the dynamic projection test is one in which a *motive* or mood is ascribed to another person in the process of interpreting or apperceiving a situation."

At first research workers were interested in an experimental exploration of psychoanalytic concepts generally and found in projection a mechanism applicable to test devices for analyzing these dynamic trends which subjects would not reveal directly. The first results were disappointing. Children and college students revealed no correlation higher than 0.4 on six dispositional traits or drives while the direction of the correlation was more frequently negative than positive. The fail-

ure to obtain simple correlations elicits a number of hypothesis: "(1) If projection reflects unconscious, repressed drives only, and if the overtly manifested drive is the complementary amount which survives when part of the total drive has become fixated in the unconscious, a negative correlation would be expected between projection test and drive rating. The correlation would not be expected to approach unity until some way could be found of partialing out the individual differences of total endowment in the drive concerned. (2) That the tests simply needed further item analysis, or, (3) that different drives operate in different ways in regard to projection either because of their moral standing with the ego, or because of intrinsic differences in drive quality . . . (4) projection shows 'ambiversion,' the total result in the projection test being the outcome of opposing trends (a) to project what is most strong in the unconscious, (b) to project partly on the subject's conscious knowledge of his own overt character."

This article analyzes further the factors in the projection test situation, formulates clear hypotheses and suggests research designs calculated to lead to more clinically effective projection tests. Three varieties of projection are found in examiners and subjects. The first is projection through Naive Inference from Limited Personal Experience (N. I. P. E. Projection) in which the individual examiner deduces that behavior of the subject springs from a certain motive the examiner would have in a like situation. The examiner, because of subject's youth and inexperience, does not consider individual differences in background, temperament and other factors between himself and the subject. The second variety is the defense mechanism recognized by Anna Freud and deals with dynamic trends done, or, trends which are unconscious, or, trends which assail the security of the ego. The third is the projection of Press Required by Emotional State (called P. R. E. S. Projection) in which there is a distortion of perception which makes the real world fit in with the immediate emotion of the subject.

Certain other less important and less clear processes contribute to or modify projection in the test situation. *Phantasy* or the tendency for the subject to have heightened reactivity to items which lead to satisfaction of a drive paramount in him at the time. *Projection for social gain* in which the subject seeks to escape punishment by stating that another person has the undesirable trait. This is best classified as a wish-fulfilling illusion. *Introjection* which brings to the subject the qualities of the object.

Identification in which self and object are equated and thus self qualities are ascribed to the object. Transference, displacement, isolation, regression, turning against self, reversal, reaction formation, and rationalization also modify an individual's interpretation of a dynamic precept. When the examiner is looked upon as a father surrogate, the patient imputes to the analyst the tendencies known in his father.

Projective test devices are extremely diverse in character. The following are most widely employed: "observation of distortion of trait ratings of self or others, of perceptual interpretation of intentionally vague representations, e. g., ink blots, cloud pictures; rapid exposures on the tachistoscope; vague photographs and pictures; indefinite vocal sounds; completion of stories and of pictures suggesting dramatic; judgment of motion in a problem situation; free design in drawing; word association; and dramatic productions and phantasy in play material." Many of these have strayed a long way from the original meaning of projection. In the thematic apperception test, in story completion, in musical reverie, and in some forms of play the actual projection stimulus serves for no other purpose than to start a long strain of free association and phantasy which is divorced from any interpretation of a situation.

Much research has been done but little has been gained. Any diagnostic test should meet certain demands (1) to define the psychological variables, or real life situations, against which its measurements

are to be validated; (2) to show that these variables actually exist as functional units, as does, for instance, a need, preservation, intelligence; (3) to provide in the test itself quantitative and qualitative series from which scores may be obtained for validation against the first demand mentioned above.

The Rorschach seems to meet none of these requirements. If this test fails to show validity in the ordinary sense it is defended on the grounds that: there is more to the test than can be obtained from a mere analysis of results; that its administration should be regarded as a controlled experiment which needs not to be treated statistically; that it is concerned with unique, and not common, traits; and that it is designed to test the whole personality and not separate facets. Most of these claims are obviously untrue and absurd.

Certain broad suggestions for research are brought into relief: tests should be referred to by the principal mechanism or process involved (Projection, Phantasy, Transference); that tests and conditions be set up to measure separately each of the three distinct forms of projection; that modifying influences be studied (general experience, intelligence, insight, divergence from the group mean, inhibition, etc.); that investigation be made of the role of modifying factors (does the same thema appear in spite of different stimuli, can the stimulus situation be arranged that the drives of the subject's id, ego, and superego can be distinguished from the press of the milieu without recourse to secondary aids, etc.) that exploration be made of remote or different response situations such as humor; that there is, perhaps, a wider task, i. e., the "investigation of the amount of agreement on various aspects of personality diagnosis obtainable among diverse, clearly distinguished varieties of dynamism tests, e. g., projection tests techniques, phantasy test techniques, and humor test techniques."

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STUDY OF PERSONALITY SYNDROMES. DANIEL HORN. *Character and Personality* 12: 257-274, June 1944.

Personality measurements distinguish two aspects, *parameters of personality* or the variations which occur from one individual to another, and the *variables of personality* or the variations which occur in one individual under one set of conditions to the same individual under another set of conditions. This paper sets up several problems, a consideration of some of the methodological problems involved in the application of statistics to the study of relationships in the field of personality and a determination of the patterning of eleven parameters of personality in two subject groups.

The eleven parameters as named and defined by Murray included: anxiety, creativity, change- sameness, disjunctivity- conjunctivity, emotionality- placidity, endocathexis- exocathexis, impulsivity- deliberation, intensity- apathy, intracathexis- extracathexis, projectivity- objectivity, transience- endurance.

The experimental group A comprised twenty-eight college men who were observed for eighteen months at the Harvard Psychological Clinic. Ratings were given on each of the eleven general traits and on twenty needs as they became apparent. These were made by a diagnostic council on a six point scale of 0 to 5.

The experimental group B consisted of forty-one children (28 girls and 13 boys) ranging in age from 6 to 15 years. They were studied over a period of 3 years. They were of high socio-economic status and attended a modern progressive school. They were rated on each of the parameters by three research staff members.

Five basic steps were involved in performing a syndrome analysis: Calculating a complete table of intercorrelation of the measures, selecting an arbitrary value of r to represent the minimum acceptable r for inclusion of a measure in a cluster, defining preliminary clusters, the highest 25% and the lowest 25% of the subjects were selected on each of the preliminary clusters to aid in "combining similar clusters after eliminating subjects with idiosyn-

cratic collections of ratings," and preliminary clusters which approximately defined the same high and low subjects were combined to form the final syndromes.

Four syndromes were identified in group A and five in group B although the fifth one of group B did not correspond closely as the other four to those in group A. The syndromes of general traits which were considered as parametres of personality were defined at both ends of the scale. They included: imaginative, creative introversion vs. practical, conventional extraversion; creative expressiveness vs. apathetic conventionality; unorganized expressiveness vs. organized perseverance; and disorganized emotionality vs. organized control.

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INFLUENCE OF FRUSTRATION UPON THE SOCIAL RELATIONS OF YOUNG CHILDREN. M. ERIK WRIGHT. *Character and Personality*. 12:111-122, December 1943.

This study investigates the effect of one kind of psychological stress upon the social relations of a small group of children. Some strong personal needs were created, partially satisfied, and then frustration of their complete satisfaction was accomplished meanwhile emphasizing the desirability of having these personal needs satisfied. The subjects were thirty-nine pairs of children, ranging in age from three to six years, who attend the Iowa Child Welfare Research Station Preschools.

The basis of the selection was on the degree of friendship of eighteen pairs of strong friends and twenty-one pairs of weak friends. They had a control session in which they were permitted to play freely with the toys in a standard "free play" situation. In the second session they returned to the same room but the materials had been transferred to a new part. This included not only the former toys

but many new ones. After fifteen minutes in this area, the children were returned to the first area and a wire screen was placed between the two sections. Thus the children could see the desirable toys but were unable to use them. This session was known as the "frustration" session. After fifteen minutes in the frustration session, the experimenter re-opened the wire gate and the children were permitted to re-enter the attractive area.

Five categories of social interaction were differentiated: cooperative, social parallel, sociable, social matter of fact, and conflict. Two important shifts were observed from free play to frustration in the social behavior of the groups. Cooperative behavior showed an increase from 38.2 to 50.4 per cent. The decrease in the time spent in social conflict was the second important change. The strong friends showed more cooperative behavior, less conflict behavior, and more violent aggression against the experimenter than the weak friends. There was a marked change in emotionality from a happy, carefree mood in the free play to an unhappy mood in frustration. The amount of time spent in destructive behavior increased significantly under frustration so that destructiveness showed a positive correlation with negative emotionality in frustration.

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STUDY OF 1063 NAVAL OFFENDERS. BERNARD LOCKE, ALBERT C. CORNSWEET, WALTER BROMBERG AND ANTHONY A. APUZZO. *United States Naval Medical Bulletin* 44:73-86, January 1945.

Numerous factors relative to behavior leading to incarceration in a Naval brig are examined from a psychological and psychiatric viewpoint. One thousand sixty-three unselected and consecutive cases were examined in the following 13 categories: causes for admission, length of time A. O. L. or A. W. O. L., previous Navy offenses, previous civil offenses, sur-

face reasons for offenses, education and intelligence, age of offenders, marital status, racial distribution, nativity of parents, psychiatric findings, length of service prior to first offense, and school delinquencies. Tables are given on each of these groups.

It was found that the seriousness of the problem to the Navy showed a loss of over 90 man years of service, repeaters comprised 53.8 per cent of the number of admissions, 16.7 per cent of the men showed histories of civilian arrests before entering the Navy, these men were not inferior to the general population in intelligence or education, 42 per cent had been

in trouble in school, the average age was 21.55 years and the median 19.64, roughly 30 per cent had been or were married, definite neuropsychiatric disorders were found in 21.9 per cent of the group, absences were most frequent after completion of boot training and after first tour of active duty.

The paper strongly recommends a longer period of training, further screening after the first test of duty, and a program of reeducation to aid in developing the maturity of the men.

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D - Anthropology & Sociology

CHARACTER STRUCTURE — ITS ROLE IN THE ANALYSIS OF INTERPERSONAL RELATIONS. ERNEST BEAGLEHOLE. *Psychiatry* 7:145-162. No. 2. May 1944.

The author attempts to clarify the multitude of interpersonal relations on the basis of classes, types and variations. He deems any classification unsatisfactory which is based only on primary human needs.

The patterns of feeling and behavior and the general directives for interaction in a society are set by culture. It makes man able to control his biological drives. Without this control only an animal life not a social life would be possible.

More specific directives about relations between different social strata are given by one person's membership in a caste or class. The more specific properties of a person's interpersonal integrations are added by such institutions as schools, family, church groups, etc., with their different backgrounds and traditions. Each person develops a character structure by organizing his own individual needs, emotions and thoughts in congruence with the major directives of culture. The basis of this organization is laid in infancy and childhood by the techniques of reward and punishment, gratification and frustra-

tion. This structure enables the adolescent or adult to respond to the values of his group, and it is reinforced by the ever-widening activity in this group. In a static society this primary character structure may be the only one needed. In cases of profound changes of the society, however, as in revolution, the person may be forced to develop a secondary character structure which will enable him to adapt to the new pattern of values.

By the same reason, War will force man to superimpose a secondary character structure to the primary one. Purposes of war contradict directly those of a peaceful group existence. Work motivations in the armed forces are quite different from those of civil life. In trying to harness the two conflicting character structures anxiety may develop and war neurosis may result even before combat conditions are met.

Investigations have shown how a character structure which has been established in childhood influences the behavior of races and tribes. The reason why the Sioux Indians are unresponsive to white education and social improvement can be traced to their pattern of child raising, which is quite in contrast to the white pattern. The author thinks that only the undersanding of the basic concepts of

Sioux Indians character structure by the Administration can bring fruitful results.

A similar problem exists with the Maori of New Zealand. The Maori are extremely indulgent to infants who are the center of the family's attention. The children's needs for attention are gratified on every occasion; a physical punishment does not exist. At the age of 3 however, a sudden change takes place; the child is then expected to take care of himself, and to help about the house. Sometimes he is punished harshly. A world of safe security is suddenly replaced by one of insecurity and loneliness. Only in the friendly company of children of his village he may regain some security. This experience of childhood lays the pattern for his behavior in later life. The feeling of loneliness follows him into his adulthood. He can assuage it only by being hospitable and friendly to his fellow tribesmen. All his goods are theirs, all theirs are his. He rejects the values of a rugged individualism; he works only enough to maintain a traditional standard of living. When he goes to the neighboring city to engage in factory work, he returns at frequent intervals, feeling homesick for the friendly warmth of his tribal group. He is not attracted by the white man's standards of values. A fundamental adaptation to the white culture, however, is necessary for the Maori and this can be achieved only by teaching the Maori other techniques of child training.

Under the impact of Western civilization the Maori offer some significant aspects of social disorganization. Social disorganization is best viewed in terms of conflicting character structures. It occurs when there is a conflict between two or more contradictory ways of integrating significant interpersonal situations.

Changes in character structure move more slowly than changes in social structure, because as long as a person obtains gratification by his old integrations, he will persist in his old ways. For the same reason, the older Maori generation shows little social disorganization, whereas the middle generation either follows the old ways of life, or has absorbed the white man's values and is striving for a higher standard of living. It is this group in

which social disorganization is most pronounced. The younger generation having accepted a way of life, that resembles that of the lower class European society, shows but little social disorganization.

The author admits that it is easier to determine the character structure of a primitive pre-literate group than to apply his theories to the complex structure of Western society. Here we are dealing with the character structure of millions of people, grouped into a number of distinct subcultures which differ from each other according to traditions, religions, class consciousness, ambitions and ideals. Fromm defined as the basic character structure of the Western man his desire to assuage his loneliness by an intense compulsive interest in work, in being "efficient." While this may hold true for the upper, and partly for the middle class, it does not apply to the lower class. Here the work motivations are quite different; here it is not the strive for an ever increasing standard of living, but that for social and economical, and also psychological, security that offer the motive for the urge to work.

That the major obsessional drives of the middle class are also changing from work to other activities, is indicated by the rise of "perfectionism" in sports, hobbies and recreation. What once had been done as a fun, now is done with a desire to do it perfectly, or else to suffer the feeling of failure and guilt. This suggests that under the impact of the present economical system there are fewer satisfying integrations to be achieved in business and industry.

The author then refutes Fromm's contention that Western society produces automaton-like character structures by compelling men by external necessities to develop an inner conformity and states that democratic society offers a wide scope for personal deviants and unique social groups.

The concept of character structure offers an efficient tool for understanding the psychology of national groups. It enables the investigator to explain differences of national behavior by reference to the way in which basic human needs are organized into durable but dynamic structures by the culture and tradition of the national

group. It is basic for any effective wartime propaganda and is even more important for building a lasting peace. For only a clear insight of what has to be changed in the character structure of Japanese and Germans can we direct their drives into peaceful channels.

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A WORLD WITHOUT PSYCHIC FRUSTRATION.
FRANZ ALEXANDER. *American Journal of Sociology* 49:5. 1944.

What to do with surplus energy is the problem confronting Alexander; a reaction to the immutable law of psychic entropy. He feels that a world without end (or frustration) is likely but inconceivable anyway, on the assumption that there must be both Aim (and Denial) in a sensate world. When wishful thinking (hope) is interdicted, such a world goes to pieces (phantasy destruction), and therefore such thinking should be avoided. He claims however that where interdicted, it becomes Utopia (put together again). He is thus straddled on the horns of a dilemma.

Frustration is to him an affective tone, permeating all tension states of dissatisfaction, which serves as a healthy goad to all new ties and outlets. The short-cuts to surmount obstacles persist, but new ones have ever to be devised. The blockage to realisation need not be physical (as in hunger), but physis (prevention of revenge, ambition, domination or display), "... as long as it is unfulfilled" there is a frustration situation. At all events, the *struggle* is the thing, not the biological goal; for the restoration of the balance of equilibrium is always secured. Nothing is (or should be) too easy in life, though it depends, in part, on what the individual (rather than the environment) considers difficult. All is relative. Technical advances and mutual good-living may re-

duce the challenge of frustration, but our resources are not infinite; and some (voluntary) control will always be requisite. It is not a 'world without end' after all, and if ever it is in danger of becoming so, i.e. static and robot, by materialistic perfection ("push-button civilisation"), it must be galvanised by a spot of frustration, for 'equalitarian justice' is depressing; so insecurity survives and the masses are tools for (political) advantage. In earlier phases, Life was routinised and became more assured a thing (less hazardous), so primitives (like our children today) still get the best out of life, because they are unschooled to emancipation. It is the relentless quest, the seeking for ends, the provision for tomorrow, which forms the Goal immediate; whence Art and Ritual flourish in relaxation (another instance where frustration is not really required).

Nowadays "all is barren." Irwin (not quoted in this connection did some capital work in anthropological lines with this very problem. In cultures where frustration is keenest, the output is the strongest. Oversecurity results in dull decadence. Happiness (says Alexander) is an unscientific concept; for our advances have reached the very opposite goal today. Greater efforts are made, while the surplus energy this reflects becomes less; indeed it is absorbed in the facilitation machine, and hence "becomes an end in itself." A vicious circle is thus established, as we must never allow ourselves to reach our fictitious goals. For example *tourism* is measured nowadays rather in the miles covered (struggle) than in the memories of scenes brought back (goal); thought carried to this degree, his argument would seem inconsistent. Paradoxically, our socially 'reasonable' machinery increases rather than diminishes our anxiety, (by placing the ictus on the search not on the grind); instead of freeing our soul, there is a numbing of all creative energy (libido) although it is doubtful if this can ever dry up. There is fear of all risk, initiative and challenge nowadays as the expression or outcome of our anxiety. Perhaps fear of boredom is also a factor in stimulating this restless pursuit of nothings, "keeping busy at all costs," but the entire removal of obstruction and all frustration

is neither desirable nor possible; indeed in the sexual and other spheres it seems a desideratum, to pique the appetite and pep the jaded nerves. (The blunting of natural appetites may however be responsible for demanding such condiment; primitive man, having less social convention, is blocked with less internal inhibition). Primal hunger is keen. Folklore and saga nicely illustrate however the setting-up of barriers (or skittles) to man's desires; this to bring about delimiting of self with difficulties and frustrations that only a hero may overcome, in triumphant winning of

his prize and goal. The author forgets to point out that the barrier is here the incestuous one; it is a moot point if this be paradigm for all frustration. He makes no mention of repressed aggression as the cause of such anxiety, that activity rather than passivity is able to reduce. It is always a sign of decadence (or infantility) when we seek to win the world from an easy armchair (stability); Madach's "*Tragedy of Man*" is relieved only by the final injunction, "Struggle and Trust."

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E - Psychotherapy

REHABILITATION OF THE PSYCHIATRIC CASUALTY. THOMAS A. C. RENNIE, M. D. AND LUTHER E. WOODWARD. *Mental Hygiene*, 29:32-45, No. 1, January 1945.

The authors emphasize that the present war has focused the attention of psychiatry upon the incidence of mental ill health throughout this country. Of the fifteen million men who had been examined by the armed forces induction stations a total of 4,217,000 had been rejected as of June 1944. Of this group, 16.6 per cent were rejected for mental diseases and 13.8 for mental deficiency. Thus 30.4 percent of the men tested for the fighting forces were found inadequate for one or another neuropsychiatric reason.

As to the discharge of neuropsychiatric disability from the armed services, the rate is somewhat higher — 44.6 per cent of all disability discharges, neuropsychiatric illness thus constituting the largest single reason for discharge. At the present time over 300,000 men have been discharged for neuropsychiatric conditions. These figures do not include vast numbers of men discharged for physical reasons in which the emotional component is great.

The authors point out that the emergency facing us now necessitates the creation of more facilities for the care of those mentally disabled veterans who come back to civilian life. Such a rehabilitation of the rejectees and disabled veterans has

been successfully attempted in the Payne Whitney Clinic of the New York Hospital under the supervision of Thomas A. C. Rennie. This work has been made possible through a grant from the Commonwealth Fund. 380 cases, mainly those sent from the Veterans' Center, have been admitted for study. Their illnesses ranged from acute psychoses to psychosomatic disturbances.

Best results were obtained in the psychoneurotic group and especially in anxiety neuroses. Cases of so-called "battle fatigue" also offer a good prognosis. Battle fatigue occurs essentially in men with good previous personality organization, and consists of overwhelming anxiety, exhaustion and restlessness. Cases of hysteria showed only 50% improvement. The obsessive-compulsives did even less well. The poorest prognosis was found in severe hypochondriacal reactions.

Interestingly, some of the psychotic states do well under psychotherapy. Acute schizophrenics have responded surprisingly well. Cases of reactive depression and recurrent depression also responded well. However, in psychopathic personalities, alcoholics, and sexual perverts, the prognosis must be considered dubious.

The organization of the clinic at the New York Hospital consists of several psychiatrists, an internist, several psychologists, social workers and occupational therapists, and in addition, one employ-

ment counselor of the U. S. Employment Service.

The aim of the clinic is to restore a man mentally at least to his pre-induction level.

The man who appears to be lost without the authoritative system of the army is usually ready to build up a quick and strong positive transference to the civilian physician. Every opportunity is then given to him for the ventilation of resentment, anger, anxiety, disappointment and discouragement. Recreation, social contacts, and outlets for creative urges, in addition to the actual psychotherapy and the efforts towards modifying of faulty family attitudes are provided. If resentment at the army experience is too obstructive to therapy, sodium-amytal interviews are employed, which are very helpful. In carefully selected cases, various group-therapy methods are used.

In order to bring rejectees and disabled veterans back to civilian life as early as possible, Rennie and Woodward have maintained contacts with the Army, the Navy, the Veterans Administration, the Vocational Rehabilitation Bureau of the Federal Security Agency, the American Red Cross and many national health and social work organizations, as well as the representatives of large church bodies. In addition to that, they are cooperating with a number of companies in the formulation of a veterans' re-employment service. As the number of rehabilitation clinics and the trained personnel is entirely inadequate, an additional financial support is necessary to broaden the effectiveness of existent psychiatric resources.

Thus far, two out-patient clinics and one in-patient service have been established in Chicago. San Francisco has a new veterans' clinic. The Duke University clinic is offering service to South Carolina and Georgia. The University of Texas is developing a good State program, and New York City has five specific psychiatric rehabilitation centers.

Looking over the above described conditions we can see that the present emergency can be met only by developing more psychiatric out-patient clinics, which would provide mental care by at least one

psychiatrist to 100,000 population. In addition to that, about 1,300 new clinics are needed.

Woodward lists the necessary major developments under three categories:

1. Education in interpreting the needs of returning men to the civilian population.

2. Establishment of the fullest possible clinical and related facilities.

3. Liaison service between the various governmental, professional, and other special groups.

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WAR AND GROUP THERAPY. DONALD A. SHASKAN AND MIRIAM JOLESC. *American Journal of Orthopsychiatry*. 14:571-577, No. 4, 1944.

On the basis of Paul Schilder's experiences with group therapy of neurotic individuals, the authors felt that numbers of soldiers subjected to the same environment and training with an identical goal can be treated collectively. When an individual soldier manifested marked deviation from the problem common to the group he received supplemental individual treatment. This paper deals with a small group of soldiers under treatment for a period of six weeks.

The soldiers were from a large station hospital at Camp Callan, and included men who had broken down while in basic training, or who had had months of service or men who were casualties from overseas. At any one meeting the group included one-fourth to one-third of the total, and functioned entirely on a voluntary basis. Sessions were held five times a week, lasting from forty to sixty minutes with the psychiatrist and two social service workers; visitors were welcomed and were free to enter in the discussions. The psychiatrist acted as leader and interpreter of the material and made it clear

that no matter what the individual's attitude as expressed towards the psychiatrist or army there will be no punishment. The psychiatrist's attitude is one of sympathetic understanding with the problems the men face so long as they are sincere and honest in presenting these problems.

The discussion at the first meeting was initiated by a soldier who had experienced severe accidents with long periods of unconsciousness and who was admitted as a case of hysteria. Following his story men began to discuss the threat of death and the fear of dying. Fear of death was brought out repeatedly by the South Pacific veterans, pointing out that after returning safely from combat zones they were particularly upset to see their comrades die in hospitals from disease.

After the discussion of death and its significance the psychiatrist pointed out that feelings of self-interest were present and acceptable in the child, but not in the adult, but that an immature person would carry over these feelings into adulthood. When a member of the group expressed that his nervousness was because his mother and sister were nervous, the group commented that "one couldn't learn to be nervous," and developed the thought that instability resulted from deep emotional conflicts associated with instinctual fear of death and separation.

The writers describe various problems discussed in the group meetings. Dislike for the army was expressed freely by those who felt it, and the group agreed that service in the army tended to aggravate an already existent problem. In cases where the therapeutic benefits of open and free discussions in the group were not sufficient to insure a good adjustment, the soldier was given individual psychotherapy.

The purpose of using the group as a means for the individual to relieve that period of his life from which his trouble originated is threefold: (1) To give him relief of those feelings of isolation which a deep-seated problem gives him. (2) To present to him the universality of his problem through the knowledge that oth-

er members of the group share it. (3) To stimulate his research for a solution, since he can no longer continue to hide his problem from society.

It was typical of the soldiers to be petty, oversensitive, overaggressive, and overwithdrawn or hypercritical. Their attitude about health, sex, and death were characterized by interest not as normal biological functions, but as belonging to the supernatural. Life was either super-efficient or super-failure; sex, either promiscuity or total lack; death, always violent, sudden, unnatural. The degree up to which these neurotic attitudes were corrected, depended upon the individual's strength to change his emotional reactions to past experiences. The group offered each individual strength of the group but the individual himself had to make the change. Those who did not adjust were recommended for discharge from duty.

The authors feel that group psychotherapy is an aid in establishing the future ability of soldiers to adjust to military life and serves as a sound basis for disposal of the patient. This method also increases the morale of the psychiatric service by socializing patients who feel isolated.

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GUIDE TO INTERVIEWING AND CLINICAL PERSONALITY STUDY. JOHN C. WHITEHORN, M.D., *Archives of Neurology and Psychiatry*. 52:197-216, September, 1944.

Dr. Whitehorn offers a guide primarily for the medical student as clinical clerk or intern in examining or evaluating the personality of a psychiatric case. He discusses details dealing particularly with the use of the interview for obtaining the patient's problem as well as his attitude and reactions to it. The guide does not deal with psychopathology considered in a differential diagnosis, nor does it claim to substitute for training or discussions with teachers essential in developing the nec-

essary skill and facility for interviewing psychiatric patients. The first interview is important inasmuch as it affords the physician an opportunity to obtain first hand information of the patient's presenting problem, his attitude towards his difficulties, his family, doctor or hospital. A discussion of the subtleties in the technique utilized in eliciting information is given, emphasizing the inter-personal relationship between physician and patient, and pointing out that in a psychiatric examination the doctor is both participant and observer. The guide discourages set questions arranged in systematic order, but offers suggestions whereby the doctor will elicit a proper story from the patient, and observe the patient's emotional reactions, his personality traits, as well as making a good rapport with the patient. The suggested outline is as follows:

Presenting Problem and Present Illness: The present illness (chief complaint) is usually obtained in answer to questions, "Why did the patient come for help?" and "What were the circumstances which led to his coming?" The patient's complaint is best recorded verbatim, avoiding medical terminology to interpret his complaints. The manner in which the patient states his difficulties will indicate not only the problem but also his attitude towards it. Then follows the development of the complaint which in the medical examination is the "present illness." The patient's own story of the development and progress of his illness is recorded in a condensed form. If the patient is evasive, it is well to assure him that you are interested in how the situation affects him, his life and his feelings. It is well to find out from the patient what he expects the doctor or hospital will do for him, and what type of help he is ready to accept. The patient may find it difficult to accept the necessary help, and thus before interpreting the therapeutic results his attitude must be understood.

Simple Tests on Mental Efficiency and Observation of Mood: The author does not discuss any definite technical mental tests. He does, however, make a few simple suggestions which may serve as a quick orientation and prepare the patient for further details, especially when

dealing with a suspected psychotic patient. After a discussion of the patient's complaint, he is questioned concerning his work and the effect his difficulties have on his work, and also whether he finds it difficult to concentrate. Following the patient's affirmative reply, the mental arithmetic test is introduced. The patient should also be asked for specific answers regarding his power of concentration on practical matters such as keeping track of time, meals, people's names, etc. During the concentration tests the patient may be asked whether his lack of concentration is not due to distracting thoughts, noises, or imagination. This will elicit any hallucinations, and the general behavior, style and tempo of the talk will indicate disorders of mood, which in turn will suggest disorders of mood, which in turn will suggest disturbances of sleep, appetite and bowel function.

Depressed States and Their Influence on the Interview: One should not tire a patient, especially if depressed. A seemingly simple conversation may be exhausting to the depressed patient, and when exhausted, the depressed person will most likely give unreliable information.

Routine Questions and Examinations: After rapport is made, the examiner may ask personal questions as to place of birth, past illnesses, school record, jobs, marriage, children, social and economic circumstances. Questions about habits of alcohol, drugs, tobacco, and sex experiences, as well as self-evaluating personality should be asked in a matter-of-fact manner. The biography of the patient is important for an adequate personality study, and may be gotten either from the patient himself, or supplemented by other persons.

Special Aspects of Interviewing: Common Difficulties in Psychiatric Interviewing: Unprofitable arguments with the patient, and misinterpretation by him must be avoided. By pointing out specific achievements, the patient should be encouraged that in spite of his difficulties he is able to perform various responsibilities. If he feels stigmatized as abnormal or neurotic, it is well to reassure him he is just human and that as a physician the concern is how his human interests affect

his illness and health. At times it may be an advantage to acknowledge to a patient his emotional reactions as strange and thus obtain from him an elaboration of his feelings.

Irrelevant Talk and Its Relevance to Personality Problems: In a personality study there is no such thing as irrelevant talk. Irrelevance on the part of the patient is indicative of his need of self-justification, and the physician must be alert to all evidence from which he can infer the nature of the implied accusations of guilt against which the irrelevant talk is a defense. Much needed information will come out spontaneously, and if the physician does not know what to listen to much therapeutic value in letting the patient talk will be lost.

The Interview as Constructive Examination of the Patient: Haste or abruptness must be avoided during the interview. The interview serves a twofold purpose: it furnishes the physician with information and has therapeutic value to the patient. Hence an understanding and appreciative response on the part of the physician will gain the patient's cooperation and will offset any embarrassment or resistance.

The Immediate Situation and the Best Attitude Towards It: If a patient is from the psychiatric or surgical ward, his emotional reactions will be altered and may hinder an understanding of the problem. Despite previous knowledge as to the diagnosis, the physician should inquire about the patient's attitude, the illness and the manner in which he copes with it; the manner in which a patient accepts his dependency imposed by the illness, or his soliciting sympathy will indicate the patient's personality. Welcoming invalidism may indicate the need to escape from a temporary set of anxieties. Tact and ingenuity will help in discussing personal issues. Questions concerning occupational fatigue, attitude towards rationing, children's problems in school, etc. will indicate the patient's sense of responsibility. An insight in the patient's needs and difficulties can be obtained only by an understanding of the dynamic considerations involved in anxieties.

The Dynamic Considerations in Personality Studies: One must be steeped in knowledge of various personality disorders in a clinical personality study. The suggestions in this guide is to help obtain an understanding of the patient's maladjustment, its development, and reasons for its continuance. In studying the biographic development of personality trends one must guard against contributing the cause of an illness to any general dramatic personal event or impersonal trauma. Reactions are determined both by attitude and by circumstances, the understanding of which will help in the method of therapy.

Relatively Simple Reactions of Anxieties. Anxiety — the emotional tension associated with fear or excitement — is a human experience important both for good or ill. It may prepare the individual to be on the alert and stimulate in the growth of the personality. But when excessive or prolonged, it may disorganize or disrupt the anatomic regulation of the body, especially the gastro-intestinal, circulatory, or respiratory systems. Action serves as an antidote for anxiety, and by providing release through appropriate action, one can profit from the increased tension rather than be a victim of it. Action in itself, although relatively futile, has value in reducing anxiety, which explains why persons drift into habits of certain set activities when anxious. These range from simple tics, embarrassed laugh, twiddling a watch chain, to the more elaborate obsessive rituals. Anxiety during formative years may become associated with specific emotional and visceral reactions as in vomiting, anorexia, and trigger-like reactions of the sexual system to a specific stimuli. Fastidiousness towards food, easy disgustibility and vertigo are common examples associated with anxiety; fear of death is not the common cause of anxiety. Anxieties usually arise from interpersonal relationship and interpersonal attitudes. People's capacity to tolerate anxiety differ; those not particularly endowed with an abundant vitality and enthusiasm, and anxiety may affect the physiologic functions to a point which may be experienced as an illness.

...*Simple Physiologic Expressions of Anxiety. Their Detection and Treatment:* Characteristic physiologic symptoms, such as moist hands, mopping the sweat off the forehead, tense posture, fidgety moods of the hands and feet, an uneven or strained voice, frequent swallowing movements, wide pupils, excessive vigilance or preoccupied inattentiveness and general restlessness, are observed in the initial interview. The treatment for these is not symptomatic, but directed to the removal of the source of anxiety, usually directed towards helping the patient deal effectively with his difficulties in personal adjustment.

Hindrances to the Simple Management of the Anxiety Effects: If the anxiety producing situation is too difficult for the patient to solve, a simple knowledge of the anxiety is not sufficient to help him. In such an event the psychiatric interview must be more subtle.

Neurotic Defenses and Their Relation to Everyday Life: Common Defenses Against Anxiety and Their Ill Effects: Pathologic anxiety or depression may be called primary psychopathology, in contrast to the secondary psychobiologic reactions which are merely certain neurotic defenses against depression or anxiety. These are psychobiologic devices, protecting one's self-esteem in a second rate fashion, serving as a sort of automatic avenue to consolation. This is seen in the hypochondriacal complaints, for sickness and fatigue are acceptable excuses for failure and are a means of gaining attention and pity, which serve personal props to emotional security in lieu of affection and respect. Neurotic defense mechanisms are habit forming and attenuate the psychic pain or failure of security, but they are not altogether satisfying, for they are inadequate in developing self-assurance. Hence they produce complications of shame, disgust, resentment, dependence, or other mixed feelings which in turn stir up anxiety or depression.

From the psychotherapeutic point of view it is desirable to help the neurotic patient to rediscover and utilize his capacities and thus derive genuine gratification. Neurotic defenses, though troublesome, may have value in maintaining

some kind of stability, hence, the physician should not remove them without providing other supportive measures necessary for the patient's re-adjustment. Otherwise more harm than good will result.

Compensated and Decompensated Neuroses: A person may develop an adjustment to life which enables him to function without distress. This may be termed "compensated neuroses" as is seen in obsessive scrupulousness whereby the anxiety or feelings of guilt are kept at a minimum. Situations threatening this adjustment will break the "compensation" and "decompensated" neuroses will develop, manifested by acute anxiety for which the patient seeks help. If the patient does not endure much anxiety, attempts at radical re-adjustment will likely be defeated.

Personality Trends: Habitual Responses to Conflict and Anxiety: Personality trends are habits resulting from attitudes and sentiments acquired in dealing with anxiety-producing situations, the regularity and adequacy of which determine the effectiveness in a personal adjustment to life. The abnormal trend is often an exaggerated expression of the normal. In a mildly exaggerated form, and when constructively applied, these personality trends have great social value. In psychotic states patients exhibit personality trends in an excessive and caricatured fashion.

Sentiments: The patient's sentiments or prejudices towards his parents, siblings, church or state, or secret societies will give a clue to his personality trends.

The Need for Formulation of Personality Problems and Trends: All sources of information should be formulated in order to gain an insight into the patient's inner conflicts and their possible solution. Repeated interviews are important in personality studies. The result of the medical history, physical and neurological examination and special psychometric and laboratory tests must be evaluated in order to arrive at sound conclusions.

Relation of Personality Trends to Interpersonal Issues: The outstanding personality trends represent the habitual way in which a patient solved interpersonal issues. This is seen in the anxiety and in-

security resulting from inadequate feeling and affectionate response of parents and other loved ones, and which manifests itself in attention-seeking mechanisms characteristic in childhood. Personality trends develop as systematic ways of anxiety generated by conflicts resulting from interpersonal issues. The individual trends discussed in this guide are: Obsessive, hypochondriacal, neurasthenic, constitutional inadequacy, addiction, and paranoid trends. There are also the tendency to daydreaming and delusional and hallucinatory pre-occupations, the dissociative trend, the organic neurosis and psychosomatic condition, and the "don't mind" trend.

Constructive Trends and Integrative Forces of Personality: The purpose of the interviews should be not only to find the pathologic personality trends, but to evaluate the person's assets and constructive uses of even second rate patterns of reaction.

Perspective on Personality: Situations and Reactions. The patient may need help in obtaining a better perspective on (1) his personality, (2) reactions and (3) situations to which these reactions occur. Life situations are not adequately defined by circumstances, for issues are shaped by attitudes as much as by facts. A physician cannot understand adequately the theme of the patient's life situation until he recognizes and evaluates the attitudes which determine the issues involved.

Social Definition of Personality. The usual definitions of personality are too broad to be useful. The following definition is restricted to social significance of personality: "Personality is an organized system of sentiments or attitudes by which one establishes relationship with others and negotiates interpersonal transactions." This definition is modified by understanding that one's sentiments are relatively resistant to reasoning, but are somewhat modifiable even late in life through emotional experiences in personal relationship. Temperament, intelligence, and "constitution" heredity and environment are described.

Maturity, or the State of Emotional Growth. An evaluation of the patient's emotional maturity, which includes his in-

sight into his problems as well as his perspective to life and work, is an important part of the personality study. According to Freud, an indicator of emotional maturity in adult patients is the capacity for mutual and thoroughly gratifying erotic relationship with a mature mate. Because sexual relationship is so definite interpersonal and forms such an intimate part of life, knowledge of details about a person's intimate life which is necessary for a psychosexual criterion of maturity will be attained only after confidential rapport is made with the patient. There is no generally accepted scale of emotional maturity comparable to the established scales of intellectual development, but the following scale may be useful: Infantile Stage: characterized by complacent dependence and expectation of infinite tolerance and service from others, with petulance when wishes are not immediately gratified. Childish State: characterized by limited range or secondary responsibility with expectation that with a good excuse or ignorance the "responsibility" will be cancelled by parent. In this stage there is the need for complete trust in another. Early Adolescent Stage: characterized by much concern over independence from parents and by hero-worship as well as self-conscious awareness of sex. Late Adolescent Stage: characterized by a pose of sophistication, a "sophomoric" attitude of wise-cracking whereby an appearance of greater maturity is sought.

Unevenness of Personality Growth: In evaluating emotional growth it is well to recognize that a patient may not progress equally in all respects or relationships. A man may be more mature in business life than in his relations with his wife. One may, under certain conditions, revert to immature attitudes in certain respects and yet hold to a more mature attitude in others.

An appreciation and a well founded evaluation of the patient's stage of emotional growth has considerable therapeutic importance; it will help the physician to avoid futile and confusing incentives that have no constructive meaning at that stage and thus help in therapy.

An outline is given in the presentation of a case for a psychiatric conference and discussion. It is similar to the ones commonly used in presenting a medical case for a clinical conference.

Elizabeth Goodman, M. D.,
New York, N. Y.

SOME ELEMENTS IN ACTIVITY GROUP THERAPY. S. R. SLAVIN. *American Journal of Orthopsychiatry*. 14:578-592, No. 4, Oct. 1944.

This paper deals with a few specific processes in activity group therapy. Group workers are especially concerned by the lack of knowledge as to what actually occurs in the adaptations individuals make in the group. Most writers ignore the multilateral relationship, that is, the interpersonal relation of an individual not only to one individual, but also to the group whose individual members are in a definite relation among themselves. Workers usually concentrate upon interindividual (bilateral) emotional relationship and tend to overlook the group (or multilateral) elements and forces in personality and character development.

Because of the complex nature of group relationships, they must be studied from the point of view of three unknowns: (a) quantity; (b) quality; and (c) intensity of reactions. The group studied by the author consisted of 7 to 8 children grouped on the basis of their personality characteristics and problems so that a therapeutic effect upon each other would be obtained. The value and effectiveness of group therapy are determined by proper combinations of the participating individuals.

The children enjoy a permissive atmosphere and enter into activities such as metal work, painting, clay modeling. There are also individual, pair and group games (quoits, checkers, hand ball, etc.). Following the period of free undirected

work, the children get their meal at first prepared by the worker, and later by themselves. At the appropriate time simple and attenuated reality is introduced through trips, picnics, etc.

The five elements in the treatment processes described are as follows: (1) *The "knowable" nature of the group*: Even if one understands each individual in a group, one cannot be certain how that individual will respond in a group situation for each member present goes through a process of partial de-egotization. In

(2) *The Role of the Adult*: The role of the adult here differs from that in a social club, in that the worker does not occupy a prominent role nor is he the central person. The worker instead, plays a neutral and comparatively passive role, he is dissociated from authority or support. Through conscious strategies and techniques he withdraws from entering in interpersonal conflicts and relationships among the children, but does offer help with their work in the arts and crafts when they ask or need it.

(3) *Social Fixity Versus Social Mobility*: Children may fail in a regular group but will adjust well in a therapy group because in the former one finds fixed codes, and pressures, to which the neurotic or otherwise disturbed individual cannot adjust since he persists in his pattern of behavior and individuality which brings him in conflict with the group. In the therapy group such an individual finds a permissive atmosphere wherein the child's autonomous needs are not curbed, and is able to develop at his own level without being stigmatized, or rejected. This group may be termed *social mobility*, where the child is given an opportunity to live or act out his real self, thus leading to the release of suppressed and hidden impulses, and aid him to bring to the surface new powers and talents. It is this basic dynamic of social mobility where the individual feels free to develop relationships at his own level that makes therapy possible through a group. Pressures of Social Fixity groups fail as therapy groups.

(4) *Levels of Identification*: Identifications are on a lower level in an activity therapy group than in an ordinary club,

because the capacity to identify is very weak in the individuals due to their early experiences in relationships. Capacity for relationships are developed because the therapy group centers around the ego strengthening of the individual rather than upon his libido development. In the activity therapy group the ego and libido (self and group impulses) are developed simultaneously; however, the ego in this type of group is much more evolved than is the sexual libido. Although relationships are continually in operation, and identifications are also set up, their significance is not exaggerated in this therapy group. The center of treatment is the situation which aids to overcome psychological blocking, to release repressions, and to build up self-restraint through compensatory gratification by being recognized, and accepted. The individual gains wholesome attitudes because the adult in charge does not criticize, punish, and the atmosphere in the group is warm and friendly.

(5) *Phenomenon of Nodal Behavior:* At the beginning the children in an activity therapy group do not show any evidence of overt aggressiveness; the length of the period of "warming-up" depends whether the individuals knew each other

previously. As the children become more acclimated to the group, hyperactivity (nodal behavior) occurs more frequently during the work period than during eating period. The groups alternate between stages of conflicts, fights, hilarity and destructiveness and stages of quiet and constructive activity (antinodal behavior). It is the opinion of the author that the transition from the nodal to the antinodal state is the growth-producing situation in activity group therapy, the point where personal integration and emotional growth takes place. Therapy occurs where the group follows the pattern of alternate nodal and antinodal state, for psychological changes usually accompany the transition from disequilibrium to equilibrium. Nodal and antinodal behavior result from a number of sources, such as: infectiousness of mood wherein the mood of the stronger child is imitated by the others; and interstimulation wherein the boisterous mood is intensified by the next individual and reacts on the others thus forming a chain of interstimulating acts which may reach a point of group hysteria.

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New York, N. Y.

F - Psychosomatic Medicine

EFFECT OF THE MOTHER'S EMOTIONAL ATTITUDE ON THE INFANT. FLANDERS DUNBAR
Psychosomatic Medicine. 6:156, No. 2, April 1944.

This is one of a group of papers reporting on the Conference on the psychosomatic status of the infant at birth held at the N. Y. Hospital on December 3rd and 4th, 1943.

The author reminds us that there is some truth in certain old-wives' tales relative to the influences of the pregnant

woman's prenatal attitude upon the offspring. She quotes Dr. Hooker and Sontag who showed that the embryo and fetus are capable of many reactions which can be explained by the psychosomatic state of the mother since her physiology is changed under emotional strain and the change can be transmitted to the embryo through the placental circulation and other pathways.

Dunbar explains that the human infant is less adequately equipped to cope with the extra uterine conditions than are most new born animals and most human

mothers are less capable of dealing with the helplessness of the new-born than most mammalian animals. Thus problems for parents and children are created resulting in disorders in society.

Three characteristics of the infant are cited which rendered it particularly sensitive to maternal attitudes. Namely, (1) Slow myelinization although the newborn reacts with an all-or-none response. (2) Psychically the infant has not learned to differentiate itself from the environment making for confusion and suggestibility and (3) it must integrate diverse types of experience with an adequate psychic apparatus.

Four noxious external agents are discussed to which many infants are exposed. First, the factor of emotional contagion. Here Dunbar cites cases in which an infant was in danger of becoming intolerant to liver, because the aunt who fed it, herself disliked liver, and at the time of feeding displayed emotional disgust. If the mother had not intervened the child would have been conditioned to dislike liver and get into a state where this food would physically disagree. Another similar case is cited in which egg yolk had to be mixed with milk in order to make it acceptable to the infant's great-aunt, so that she would have a pleasant emotional reaction at the time this food was fed to the infant.

The constructive thought is expressed that in text books on pediatrics and handbooks for mothers, the point should be stressed that children should not be fed food which the mother or nurse thoroughly dislikes, but rather substitute others for it.

This point takes in also whether a child is wanted or not as evidenced by little subtleties such as calling it "it" instead of he or she or "you" instead of baby dear, or by name. Such emotional contagion of parental attitudes in relation to ego development is most marked, for better or for worse.

Secondly, there is the possibility of trauma from exposure to intense adult emotions. If the infant can get through its first year without exposure to the parents' hostilities or sexual tensions, it is likely to have fewer psychosomatic disturbances. Any outbursts of emotions in the immediate family will influence the infant adversely.

Thirdly, an infant is susceptible to exhaustion through overstimulation. Although it needs parental love and security, certain periods must be set aside when the child is left to itself. A parent who is constantly in evidence is apt to overstimulate the child and, in addition, may show irritation when ordinary chores are performed. This in turn is apt to influence the child adversely.

Fourthly, inhibition of growth through overtraining, where, for example, the parent strives to make the child the kind of person the parent would have liked to be. This prevents the child from making its own experiments and thus grow normally in experience.

An interesting thought is proposed by Dunbar, namely, that certain somatic diseases labelled hereditary or constitutional, have their background in emotional injuries inflicted upon the child through faulty emotional attitudes of the parents. She cites statistics which show that cardiovascular disease in antecedents is about the same whether the group of patients had cardiovascular disease, accidents, or diabetes. On the other hand, antecedents with many accidents, (fractures, etc.) furnish offsprings with a relatively greater accident incidence. It seems that having lived with a parent or older person who has had the cardiovascular disease or the accident, predisposes the child in later years to expose itself to similar situations and eventually to succumb to them.

The author concludes by stating that the incidence rate of many diseases can be decreased by avoiding in infancy the establishment of illness habits.

William Wolf, M. D.

New York City

THE RELATIONSHIP OF NEUROTIC TRAITS TO THE ELECTROENCEPHALOGRAM IN CHILDREN WITH BEHAVIOR DISORDERS. JOSEPH J. MICHAELS AND LAZARUS SECUNDA. *American Journal of Psychiatry*, 101:407-409, No. 3.

The authors report on EEG findings in 122 children with behavior disorders. Enuresis was reported more frequently (38, or 31.2 percent) than any other trait. The children with enuresis had the strongest association with an abnormal EEG. Male children and those in the age group of 13 to 19 years had abnormal EEG findings more frequently than female ones, or children in a younger age group.

It has been suggested that lack of control is a specific characteristic of certain types of psychopathic individuals and one of its traits is enuresis. The author feels that although there is little to indicate that an abnormal EEG in these children might be a concomitant of deficient inhibitory function, investigation of this possibility might be profitable. The authors conclude that the EEG does not correlate with the vague and complex syndrome of behavior disorder but with certain specific aspects of this syndrome.

Hilda L. Mosse, M. D.
Forest Hills, N. Y.

NEUROSIS AND ALCOHOL. *An Experimental Study*. JULES H. MASSERMAN. *The American Journal of Psychiatry*, 101: 389-395, No. 3, November 1944.

The author describes experiments with cats which were conducted with the purpose of studying some psychobiologic aspects of alcoholism. The specific problem under investigation was to ascertain under what special conditions an organism would experience the need to imbibe alcohol, and would continue to do so even after many of its side-effects proved to be deleterious.

The methods used are described in detail. Sixteen cats were used and trained

to adapt increasingly difficult situations. First they opened a box of food, then they were taught to feed only after specific sensory stimuli, and finally they learned to manipulate a switch in various positions to actuate their own feeding signals. After this training was completed, alcohol was administered by the intraperitoneal route. It was found that the formerly acquired behavior patterns disappeared in the order of decreasing complexity of integration, until the original, primitive feeding reactions remained. After recovery, the animals were subjected to a severe motivational conflict, and developed inhibitions, phobias, loss of dominance, somatic manifestations of anxiety, and other behavioral abnormalities typical of an experimental neurosis.

When alcohol was administered to these "neurotic" animals, they exhibited partial disintegration of these complex responses. Direct goal behavior was restored and the neurosis temporarily relieved. Ten of the animals, after sufficient experience with this effect, continued to prefer alcohol (i.e. milk to which alcohol had been added) to plain milk until their neuroses were relieved by various experimental procedures.

The author further discusses the significance of these findings with regard to the psychodynamisms and therapy of alcohol addiction in man. He points out that neurotic human beings, like the cats in his experiments, sometimes resort to alcoholism as a means of escape from their pressing intra-psychic conflicts. The establishment of a persistent alcoholic habit, however, depends on many interrelated experimental, and possibly constitutional, factors. Thus, relatively stable persons under unusual pressure, may take a few drinks to dull their anxieties, but they do not necessarily become alcoholic addicts unless repeated and intolerable stresses induce a chronic and regressive neurosis in those especially susceptible.

The author feels that while it is evident that alcoholic human beings in their complex social milieu present relationships of much greater intricacy than do experimental cats in cages, the general psycho-

biologic principles discussed in his paper may have a fundamental bearing on the psychiatric and social problems of chronic alcoholism.

Hilda L. Mosse, M. D.,
New York, N. Y.

PHYSICAL MANIFESTATIONS OF PSYCHIC DISTURBANCES. ALFRED ADLER. *Individual Psychology Bulletin*. 4:3-8, No. 1, 1944.

Adler's article appears in the Bulletin without any reference to the date when it was written. This is a definite disservice to his work. For today, some of his statements appear outdated, and yet the reviewer knows that years ago, when they were first made, they were definitely original. Another disservice to Adler is the poor English of the translation. (The term "disposition" e. g. is consistently used instead of "predisposition," etc.).

Adler states that there is no organ inferiority that does not speak its own language which is conditioned by the problems confronting the individual. Outside influences affect sometimes one organ, sometimes another. The organic structure is a unity and a shock in one sphere influences other spheres as well.

In order to make our diagnosis we must make a thorough study of the individual's predisposition. This predisposition can almost always be traced back to the training of early life.

Many disturbances of menstruation are based upon emotional factors, which the patient herself cannot understand. Some girls unconsciously oppose menstruation. They adopt a defensive attitude. We must study the patient and find out why she is not prepared to face her difficulties and then explain this lack of preparedness to her. The difficulties in question may be those girls face during and after puberty.

Persons with a tendency to anxiety symptoms may develop giddiness arising from airophagia. "Swallowing air takes place when the patient does not feel able to face a certain situation, when the inferiority feeling is intensified and a sense of oppressiveness arises." According to Adler, individuals thus afflicted are persons who "from their earliest childhood . . . have been well aware of the social significance of anxiety, i. e. of how other people can be impressed by a display of anxiety."

Endocrine glands also can be affected by emotions, and sex glands "can be put in a passive state by emotional influence . . . Take for instance the case of a youngster who feels unmanly and accordingly does not live a life conducive to the development of the sex glands. He eliminates certain activities which the normal glandular development demands." This can result in his becoming effeminate in later years.

Sport activities may foster the "masculinization" of women. "Functional inadequacies" may develop in climacterics on the basis of the women's misconception that menopause is an illness or is connected with danger. It is a duty of the physician to enlighten the patient on this question.

Adler describes the case of a man of 26, suffering from Graves' Disease. The patient was the only boy in his family and very sensitive. "He spoke in a tone which suggested that he was very thin-skinned and found it difficult to get along with other people." After prolonged probing, the patient reported that he suffered a disappointment in love. "Six months before he fell ill, the woman had gone off with another man." Although the patient maintained that the incident was unimportant, the doctor knew "that these nervous types are the very ones who want to 'keep their hold on another person and feel deeply injured if a third person is preferred.'" He therefore, felt justified in regarding this break as the exogenous factor, especially since it occurred at the same time as the first symptoms of trembling set in.

Structural changes resulting from psychic irritation may be noted in cases of scoliosis or of fallen arches. The patient's loss of poise and self-confidence in

the face of a particular life situation forms the psychic predisposition to these postural anomalies. Curvatures of the spine often are connected with pathological manifestations in the kidneys. "All curvatures indicate very clearly that a congenital defect exists, which is characterized by the naevus (birth mark) at the top of the curve or in the segment." Cases of flat feet have a similar psychology. The sufferers often are depressed individuals. Depression may cause a loss of muscle tone. This fact is apparent in every man alive; whether he is flat-footed or not, his whole poise and bearing is characteristic of 'the man within;' he speaks with his muscular apparatus."

An organ can be lastingly harmed by psychic influences only if it has been inferior to begin with. "But where does the organ inferiority begin?" Adler suggests that more attention should be paid to study of the constitution and the way disturbances are localized at the zones of minor resistance.

Adler then mentions the fact that even fatal accidents may be "caused by the gen-

eral constitutional state," and that in the midst of the many dangers of modern life the ones most likely to be harmed are "those whose psychic disposition is at a low ebb." This type is also particularly susceptible to illness in the event of an epidemic.

The basis of all proper functions is "a state of being properly integrated within the current of human evolution . . . Factors which are of importance to the human species are those which pertain to the current of evolution . . . We must realize how strongly society is interlinked to human evolution. Integrated society is a goal, something to which we must aspire."

Individual human physiognomy, according to Adler, is "bound up, far more than we have ever realized before, with the degree of harmony existing between the individual and the social goal."

Emil A. Gutheil, M. D.,

New York, N. Y.



Book Reviews

PRESCRIPTION FOR PERMANENT PEACE. WILLIAM S. SADLER. Chicago: Wilcox and Follett Company. Foreword. 202 pp. \$2.50.

Sadler, Consulting Psychiatrist at Columbus Hospital and author of such other books as *Theory and Practice of Psychiatry*, *The Mind of Mischief*, and *Living a Same Sex Life*, etc., presents an interesting psychiatric diagnosis of the German and Japanese people over a period of the last one hundred years and suggests certain remedies if a permanent peace is to be secured at the end of the present war. He traces the aggressive nations in their individual developments of paranoia in the suspicion with which they regard the other major nations as well as the buffer states which exist between them, in the egotism with which they are possessed, their desire to dominate, their persecution complex and megalomania, as well as their delusions of grandeur.

Why wars occur, paranoid and schizoid trends, the lesson war has taught us, our position in world affairs, and the challenge of world peace outline the methodology of Sadler's approach to the problem. Indictment of our national infancy and isolationism together with our Pearl Harbor "shock" indicate some possibility, to the author, of reaching an international maturation which we have thus far failed to secure. In order to attain an effectual world wide peace organization, Sadler suggests an international flag, anthem, insignia, and oath of allegiance. Neither of these, in turn, are to "abrogate or compromise national loyalty." War could be declared more effectually and serve a better purpose through "Mankind (Universal) Government" on: fire, flood, earthquakes, famine, and racial degeneracy. Geopolitics assumes that there must always be wars. Such a philosophy is fatalistic and is the archenemy of Mankind Government. Other ideals advanced for Mankind Government are: international education,

international codification of law, literature in the universal language, etc.

Predicting that the United States will emerge as the first country of the world after this war, with Russia second, Sadler questions whether the United States will accept the challenge of assuming its place or whether it will again revert to isolationism. "If Uncle Sam does not lead the way, Uncle Ivan will," he states.

This book is interestingly written. It considers a question prominent in the minds of all people. Its psychiatric interpretations of nations and their people together with remedies affords an opportunity of extensive philosophical speculation. How much the Atlantic Charter, Dumbarton Oaks, the incidents in Greece, the utterings of unwise public officials, the rise of the vanquished 25 years from now and other factors will affect the ideal of permanent peace can only be left to time.

Chester D. Owens,
Woodbourne, N. Y.

WAR AND EDUCATION. PORTER SARGENT. Boston: Porter Sargent. 506 pp., 1943. \$4.00.

The *War and Education* speaks frankly about our educational system. It does so unconcernedly for the mores, shibboleths, and sundry philosophies and ideologies of our present educational process. Apparently Sargent is in a position to critically analyze without fear of reprisal from any group with its clichés assembled for the sole purpose of making a case for its perpetuation in the general field of education.

The purpose of the book is didacticism in its purest sense and it is non-apologistic in that sense. Through an examination of

the educational methodology as it exists at present in this country and the presentation of pertinent material in the scholia. Sargent leads us through such topics as: fundamental changes ignored, tendencies become trends, educators unaware, escape from adjustment, education as it is, results of education, control of education, techniques of control, and toward understanding. The most outstanding section of the book of this reviewer deals with the development of the scientific attitude and reasoning among the pupils of the educational process. The appeal for the reduction of subjectivism to a minimum to produce scholars in whose lives objectivism holds sway is the outstanding contribution of the book.

That education is shackled is freely admitted by most serious-minded workers in the profession. To them this book will serve well as a guiding light for their future actions.

Chester D. Owens,
Woodbourne, N. Y.

DOLL PLAY OF PILAGA INDIAN CHILDREN.

JULES HENRY. Forward by David M. Levy, New York. Research Monograph, No. 4, American Orthopsychiatric Association, 1944. pp. XIII + 133, Eight tables. Price \$3.00.

The Henry's monograph is definitely big-league anthropology and a further proof that projective and other techniques developed by psychiatrists and psychologists have already changed the form, content and meaning of modern anthropological research.

The Henry's present a brief description of those phases of Pilaga social life which are necessary for an understanding of the data concerning the doll-play of Pilaga children. Summaries of this special type are very hard to write and the Henry's are to be congratulated on having struck the happy medium between too much and too little.

The experiments followed the doll-play technique well known to psychiatrists, with some minor modifications necessitated by the external circumstances of field-work. Thus it was more or less impossible to isolate the child under study from other children, and the play often partook of the characteristics of group activity. After one of the children prepared plastiline genitals for the dolls, other children were encouraged to do likewise, and sometimes it was suggested that the baby be put to breast. Because of the peculiar social problems of the Pilaga family, the doll-group included both parents and all siblings. Other minor technical deviations were also noted. The doll play in which Pilaga children usually indulge differs significantly from this experimental doll-play, in that native dolls are not named, but merely have various designations, whereas the dolls of the experimental setup were definitely named after the members of the child's family. It was noted that a great deal of sexuality was manifested in the play with named dolls, whereas practically none was noted in play with native dolls. Since Pilaga children indulged in their usual violent sex games even in the presence of the field workers, it cannot be assumed that the sex play in which the named dolls were made to participate was a substitute for the children's own normal sexual behavior. Hence the plausible assumption of the Henry's that the naming of the dolls, in a manner which evoked the family situation, was the determining factor.

The entire monograph is tremendously rich in data as well as in intelligent and meaningful interpretations and should be read and re-read. To select certain data or discussions for special mention would mean neglecting to mention other data or interpretations equally illuminating.

The only criticism of any importance that could be levelled against this fine work is that—to this reviewer at least—the Henry's repeated assertion that there is an absence of guilt and self-punishment or even self-accusation does not seem warranted. Their own data contain instances in which the self-doll was castrated (p. XI). There were also episodes in

which restitution was made (p. XII) and relief was experienced. The Henry's explain this (alleged) absence by pointing to the fact that in normal life evil deeds are speedily followed by external retribution, and that punishment, not remorse, is feared. It may be true that Pilaga society may be able to function with a less complete introjection of the norm, than our society can, because violations of the norm are usually followed by swift, and quite direct, reprisals. This retribution furthermore takes the form of anger and undisguised aggression, instead of the camouflaged "this hurts me more than it hurts you" type of "impersonal" (?) psychic butchery characteristic of the aggressions of parents in Western society. All this does not mean, however, that the data do not validate the reviewer's belief that Pilaga society as well as ours includes guilt (or shame, as a functional equivalent,) self-reproach, self-punishment, etc., though differences in details are obvious.

The Henry's admit a certain ignorance of psychoanalysis. The reviewer knows that this profession of ignorance is due to excessive modesty rather than to real ignorance. This point is mentioned only because the psychoanalytically oriented reader will wonder why some rather obvious analytic interpretations were not made. The fact is that these interpretations would be far less obvious had the material not been presented in the right way by the Henry's—who could not have presented it in the right way were they ignorant of analysis, and had the interpretations not occurred to them already. The psychiatrically sophisticated reader will admire their restraint, but this restraint will mean some loss of understanding to those readers who cannot automatically supply their own interpretations as they go along.

Altogether this book is sound, alive and fascinating. If there is anyone who does not know already that the Henry's are top flight anthropologists, this book should suffice to persuade anyone of this fact.

It is only to be hoped that sooner or later someone of the Henry's calibre—preferably the Henry's themselves—will be

provided with adequate funds to undertake an expedition in which all new techniques of investigation—analysis, Rorschach, thematic apperception, doll-play, etc.—will be brought to bear upon a suitably large group of natives. The results would be revolutionary. In the meantime monographs like the present one serve due notice that the days of pre-psychological anthropology are numbered.

George Devereux,

New Orleans, La.

THE UNKNOWN MURDERER. THEODORE REIK. New York: Prentice-Hall Inc. 1945. pp. 260. \$3.00.

This work with its provocative title is a translation from the German by Dr. Katherine Jones. Dr. Reik, an internationally known psychoanalyst, has written extensively in his field for quite a number of years. One would expect from the doctor's pen a rather more penetrating study of criminology than the present work indicates. The reviewer throughout had the feeling that the author had approached the subject in the manner of a dilettante and that the exposition was meant for lay consumption rather than a direct contribution to the field of psychoanalysis itself. This is due, in part, to the fact that practically all of the case material has been drawn from published reports by other authors or from newspaper reports of well-known homicides. A second factor which probably has diverted the author from his original thesis is the unconscious desire to call attention to injustices rendered by jurists and juries in the conviction for homicide of innocent men. Such a thesis, of course, would be somewhat irrelevant to the main topic un-

der discussion. A profusion of clinical material is presented in a clear and understanding manner. This makes the book quite readable. Dr. Reik could qualify as a first-class reporter aside from his well-known and widely recognized talents as a psychoanalyst. In making these clinical reports, however, the discussion has been somewhat superficial. Allusions to anthropological material and the drawing of analogies between modern methods of scientific police investigation and the primitive modes of procedure in barbaric tribes are frequently called to the attention of the reader. Thus, the witch doctor of African tribes with ritualistic rigmaroles would seem to be utterly ridiculous in comparison with modern scientific police deductions. However, the underlying unconscious psychological motivations are not as far apart as they first seem to be. The illustration of the witch doctor determining from the direction that an ant crosses the grave of the murdered victim as an indication of the direction in which the murderer fled is unconsciously motivated in somewhat the same manner that the modern police investigator uses in bridging intuitively the gap between the finding of a clue and the arriving at a deduction. In somewhat the same manner jurists and juries may unconsciously come to conclusions regarding evidence that the primitive individual finds through trial and ordeal or other magical rites to which the alleged culprit is left to the machinations of Providence regarding his disposition. There is widespread belief among primitives, for example, that the murderer will be brought to justice by being overtaken through some fateful means, such as being killed by wild animals. It is the thought of these tribes that no one dies naturally but that death is the result of revenge imposed upon a person for his misdeeds. There is also the thought that the animals or other means by which the victim is brought to this crude justice are the result of a magic whereby the avenging soul occupies that animal for the purpose of bringing the murderer to earth. Quite frequently this "magic thought" suffuses the unconscious reasoning of jurists and juries and in some cases the result may be the incarceration and even the execu-

tion of an innocent victim. For these reasons the author casts considerable doubt upon the validity of decisions based entirely upon circumstantial evidence. He gives several well-chosen examples of miscarriage of justice through the sole reliance on circumstantial evidence. It is his belief that modern jurisprudence is based fundamentally upon the acceptance of circumstantial evidence as proof but it is the feeling of the reviewer that this is an overstatement. The author fails to take into consideration the fact that before actual penal servitude of any length is exacted upon an offender, he is likely to have many chances for a review of his conduct in the matter of being placed on probation in the case of a first offense, suspended sentences, reduction in the type of conviction through "taking a plea" and an extensive employment of parole from prison itself. This screening process might be utilized, however, in the case of homicide where a person who has never been arrested, suddenly finds himself in a position of being convicted of murder in the first degree. Nevertheless the experienced individual in court procedures is well aware that many more individuals suspected of homicide are permitted to go scot free in ratio to any individual who is finally convicted and executed. It is a rather rare occurrence that absolutely guiltless individuals are mistakenly executed. Dr. Reik's book gives a somewhat different impression and would lead one to believe that these mistakes are quite frequent. It is part of the exposition of his subject that he throws undue emphasis upon this phase of the work rather than an attempt to penetrate deeply into the lower levels of psychological motivations of homicide. Had he confined himself more closely to such exposition of his subject as his talents undoubtedly would permit him to do, it is felt that a much more valuable contribution could have been made. "The Unknown Murderer," as it now stands, however, is a very interesting discussion of homicide for the casual reader and as such undoubtedly finds its place among popular literature.

V. C. B.

HOMICIDE INVESTIGATION. LE MOYNE SNYDER. Baltimore: Charles C. Thomas. 1944.

287 pp. Price \$5.00.

This publication is a practical manual for the use of coroners, police officers, and other individuals called upon to evaluate the cause of violent death and the circumstances under which homicide is committed. The book is profusely illustrated and, therefore, is printed on coated paper throughout. The illustrations are very well chosen, are clear cut, and of sufficient size in each case to illustrate the point being made by the author. Only an investigator who has had a great deal of experience in the field, as well as in courts, could write a manual of such exactitude. On nearly every page there is evidence in advice given to the reader that the author has in mind the numerous pitfalls and particularly the errors of omission to which a careless investigator might be subject. He has emphasized these points by the use of bold face italics. The investigator of a scene of homicide would do well to memorize thoroughly the admonitions which the author has sprinkled so profusely throughout the book. To the reviewer, however, the professional medical training of the author is evidenced nowhere to greater effect than his constant insistence upon the preparation of complete written notes, sparing no details whatever. His golden rule of homicide investigation in boxing and bold-type states, "Never touch, change or alter anything until identified, measured, and photographed. Remember that when a body or an article has been moved, it can never be restored to its original position." Undoubtedly, dire experience has caused the author to feel deeply the need for impressing care of investigation and documentation to the utmost detail by individuals who are quite likely to be the first on the scene of the homicide and who lack a great deal of fundamental training. The author has done something unusual; namely, has prepared a final chapter entitled *Why I Wrote This Book*. He indicates that so many homicide investigations have been

muddled from the very start because of the inability of the first people on the scene to know what to do and, above all, what not to do. If more authors who wrote books would attempt in a final paragraph to justify their reasons for writing the book, there would be far less undesirable publications on the market today. Dr. Snyder, however, fully justifies his work and is ably assisted by a chapter from Captain Harold Mulbar, Chief of the Identification Bureau of the Michigan State Police, on the subject of "Technique of Criminal Interrogation", by Charles M. Wilson, Director of the Chicago Police Scientific Crime Detection Laboratory, on "The Preservation and Transportation of Firearms Evidence," and by C. W. Muehlberger, Director of the Michigan Crime Detection Laboratory, on "The Investigation of Deaths Due to Highway Accidents".

It would be highly presumptuous on the part of the reviewer to attempt to criticize any of the methods of investigation outlined in this highly efficient and practical manual. One or two comments, however, may be made which, in the reviewer's opinion, might strengthen the work somewhat. Thus, in the matter of the examination of the scene of a homicide certain technical difficulties inherent in the photographing of bodies in confined spaces, such as a hotel room, are not mentioned. The professional photographer assigned to police work is thoroughly familiar with these obstacles and has means of meeting them. In rural environments, however, the photography frequently must be done by someone who is thoroughly competent for the taking of photographs under ordinary conditions but lacks technique and sometimes equipment for getting close-ups in confined spaces. Some of the obstacles to be met in those cases are the factors of foreshortening, perspective, lighting and composition. Probably a good rule to follow, generally, is that all photographs regardless of whether they are made indoors or out, should be accomplished by the use of a photoflash and the picture composed carefully by means of a Graflex or similar type of press cam-

era. Photographs, as the author states, may be quite misleading and should be supplemented by sketches taken on the spot in which the scene is plotted with respect to dimensions.

V. C. B.

PRISONERS IN STATE AND FEDERAL PRISONS
AND REFORMATORIES 1941. U. S. DEPART-
MENT OF COMMERCE. Bureau of Census.
pp 1-67.

In order to obtain uniform and comparable prison statistics for the United States, this report is compiled from the annual census of 151 institutions for 1941. It includes also data from the separate state reports for that year.

The rate of commitments in state prisons has shown a decrease of over one-fourth during the past ten years while the Federal prisons show an increase of nearly one-half. Of these Federal commitments, most frequent were for violation of liquor laws, auto thefts and drug laws. While most frequent male state commitments were for burglary, larceny and robbery, female commitments were mostly for larceny.

State sentences were over half indefinite while federal sentences of much shorter terms than state offenders. The median age of state prisoners was much lower than that of Federal prisoners. Male negroes committed for felonies were about one-fourth of the Federal prisoners and about one-third of the State prisoners.

The white male prisoners were about half single and half married with a large percentage of foreign born. Female commitments, however, showed a very low percentage of married women. The offenses which show the greatest decrease are burglary and robbery. Each being slightly over one-half that of the begin-

ning of the decade, possibly due to the abundance of legal money and goods. There was a somewhat greater turn over of Federal prisoners than state prisoners because of the shorter and definite sentences.

During 1941 the largest number of sentences in Federal and state prisons was from two to four years with nearly twice as many definite sentences as indeterminate sentences. There were no federal death penalties and only 132 in state courts. This was below all reporting years except that of 1940.

Of the convictions for murder, manslaughter, aggravated assault and rape, there was about an equal percentage of whites and negroes while nearly three-fourths of the offenders against property were white. The largest number of convictions of foreign born offenders was from Mexico, Italy, Canada and Russia in their respective order, while the smallest percentage was from Yugoslavia and Netherlands.

Considerably more than half of the prisoners discharged were given conditional releases. This was highest in the North Eastern section and lowest in the South. As individual states Nevada and Washington have the highest percentage of conditional releases. The general trend appears to this observer to be toward more indeterminate sentences and conditional releases.

G. A. Worden,
Woodbourne, N. Y.

THE DOCTOR'S JOB. CARL BINGER. NORTON &
Co., N. Y., 1945.

What is the doctor's job? That has been answered by Carl Binger in a most adequate manner. His scholarly book brings into play both dignity and good taste which are so necessary for the medical man and which, alas, so often are found to be wanting. One has the feeling that Carl Binger, like his Hebraic medical forefather, Moses Maimonides, is a "born" healer.

Harking back to Hippocrates, he shows that the medical wisdom of lore is just as applicable today as it was then. He quotes Paracelsus when he says that "he who wants to know man must look upon him as a whole," and that "he who finds a part of the human body diseased, must look for the causes which produce disease, and not merely treat external effects." And then the beautiful words: "The greatest and highest of all qualifications which a physician should possess is Sapiencia" —; without this qualification all his learning will amount to little or nothing as far as any benefit or usefulness to humanity is concerned. "We cannot find wisdom in books, or in any external thing; we can find it only within ourselves."

The doctor's job is to bring trained human understanding to the sick. It is only thus that the doctor can help the patient to attain the Magna Carta of the mind, described by Ernest Jones as "the nearest attainable criterion of normalcy, namely fearlessness." By this, Jones means not merely courage, but absence of anxiety, and the willing or even joyful acceptance of life with all its visitations and chances that distinguishes the free personality of one who is master of himself.

Binger puts his proposition calmly and succinctly. He shows that psychoanalysis is not license, but self-knowledge and acceptance, self-mastery. With quiet force he shows the reciprocal relation of body and mind, using a language that is simple and persuasive. This book is written especially "for the patient." There it is shown how a "splinter" in one's soul may lead to alcoholism, hypertension, and so on. With the widening of the field of "scientific medicine," all too frequently the "human" side of medicine has been overlooked. Elaborating on this subject, this writer can hardly do better than to quote the author himself who says as follows: "I suspect by now that you are saying: 'He can't be talking about medicine—he's talking about psychiatry.' Perhaps I am talking about neither. These are, after all, academic labels. What I am really talking about is sick human beings, and what they want and need to get well. Francis Peabody, the late professor of medicine at Harvard whose too early death was a loss

to American medicine, once wrote: 'The secret of the care of the patient is in *car-ing* for the patient.' This is certainly true. If we dislike our patient, if we allow them to 'get our goats,' to arouse our antagonism, it is amazing how helpless we become in helping them, and amazing, too, how quickly they will sense it in spite of all our urbanities."

That psychoanalysis is not the best procedure for all and sundry patients, is well understood. Experience shows that it is only advisable in a small number of cases and patients who are well selected and these selections must be carried out by well trained internists who are well aware of the possibilities and limitations of psychoanalysis.

The chapter on psychoanalysis and medicine contains a very illuminating inquiry into the field of psychosomatic medicine. The author maintains that those who treat stomach ulcers, asthma, hypertension, etc., should of necessity be aware of the dynamic importance of the emotions. These represent a field requiring close co-operation between internist and psychoanalyst, or perhaps even a mastery of both techniques by one physician. In order to treat a patient intelligently, it is almost as important to know the kind of patient that has the disease, as the kind of disease that the patient has. Since medicine has lately become "departmentalized," and the old-fashioned general practitioner is considered on his way out, he is being replaced by the trained internist who should be, and often is, well-grounded in psychiatry, in addition to internal medicine. The author, however, admits very reluctantly that by and large, practicing physicians do not have the time to go into the training. Most doctors take to the woods when they happen to run into emotionally disturbed patients. They approach them with fear or distaste, often even with a feeling of boredom. When such attitudes prevail, doctors are probably able to do only very little for patients who present early signs of mental disturbances. And yet, that is the very time when much can be accomplished in the way of prevention and relief. The whole situation is regrettable. When there is the most hope of help, there is too often no one to turn to. Few of the clergy

can manage human maladjustments which tax the most experienced psychiatrists. What many patients need is not forgiveness but self-understanding. Not a mere intellectual insight which is often enough of little use, but an insight in combination with the emotional re-experiencing of the conflict inherent in the difficulty.

Binger advises that the patient when choosing a doctor, should select man who is well trained, and one whom he can trust. He warns the patient not to shop around and bootleg, not to play fast and loose, or expect miracles. "All you will get is bills." It is true, particularly in large and overcrowded cities. The doctor should be an honest up-right man, whom one would instinctively trust. He cannot always be brilliant. It is far more important that he possess integrity. There is no one kind of personality that is the perfect one, but the doctor's personality must suit that of the patient. There are excellent doctors who could pass as floor walkers, or ham actors, dapper stock brokers, homespun farmers, or ascetic saints. Some who fraternize with their patients and others who are aloof; some with urbane bedside manners, and others who are gruff and uncompromising. There is no patent of nobility on their sleeves. If, in addition, the doctor has wisdom and the kind of understanding that comes from suffering, and if he has tolerance and compassion, the patient may consider himself fortunate. The elder Oliver Wendell Holmes described a doctor who had a smile that netted him five thousand dollars a year. One of the greatest doctors of our time never smiled and almost never talked. He grunted in the laconic language of an Indian brave and patients flocked to him in adoration. There are some personalities that have a healing quality. I do not know why. As Shakespeare put it: "I have seen a medicine that's able to breathe life into a stone."

The author has also something to say on the medical etiquette and fees. In selecting a doctor, most people are hindered by the fear of this etiquette and by worry about the possible cost of medical care. They dread the wing-collared specialist who writes a lurid language of high-powered medical hieroglyphics. The physician must enlighten these people with dig-

nity, humor, confidence and humility. Drawing on his great fund of personal experience as internist and psychiatrist (being both a diplomat in medicine and psychiatry), as well as his rich knowledge of medical history, Binger explains in his book so much of the advances in medical science, that one can merely catalogue the high points of discussion. He defines very accurately all twenty-six medical specialties. In addition to this, he discusses insanity, sex, marriage, control of disease, chemotherapy, hospitals, alcoholism, socialized medicine, preventive medicine, and research.

To show that the psychiatrist alone, and psychoanalysis in particular, are not little tin gods, nor that they possess all the wisdom of the ages, Binger shows that this wisdom was well demonstrated by Tolstoy, Shakespeare, and Dostoevski. This insight has also been achieved by many scientists and plain everyday men.

The chapter entitled *Cure and Control of Disease* and that entitled *Achievements and Tasks Ahead* are informative and instructive and challenging to anyone of the medical hierarchy. Convalescence and the prevention of illness have been the problems of physicians from time immemorial. These chapters might well be used for any text on geriatrics or preventive medicine. They have been done with excellent care. The presentation of material is stimulating and thought-provoking.

To one, who like the reviewer, sees a large number of gastro-intestinal cases, the reading of the chapter entitled, *Office Practice, Hospitals and Outpatient Departments*, is like re-reading old masterpieces with which one is familiar and for which one has an especially warm feeling. Excellent is also the description of the milieu in which a patient finds himself in the process of illness and recovery and the subtle thoughts that go through the internist's head while he guides the patient through a maze of examinations and tests until the ultimate diagnosis and successful conclusion of the case is accomplished.

George Major, M. D.,

Reading, Pa.

SOCIODRAMA. *A Method for the Analysis of Social Conflicts*. J. L. MORENO, M. D. Psychodrama Monographs, No. 1, Beacon House, Inc., New York. \$1.25.

Aristotle observed a psychological phenomenon in the spectators of a Greek drama, which he called *catharsis*; he maintained that tragedy tends to "purify" the spectator by artistically exciting emotions. To a child the dramatic events on the stage appear as a part of the actual world. But as soon as he learns that the actors are "just playing," then the original unity between phantasy and reality in the child's mind is broken. Psychodrama is an attempt to breach this dualism and to restore the original unity.

Every individual in his lifetime takes part in a number of roles, which to him seem private and personal, but which overlap the roles of millions of others. These overlapping roles are of collective character and are called by Moreno, "sociodramatic roles;" those representing individual ideas and experiences are called "psychodramatic roles."

Psychodrama deals with inter-personal relations; sociodrama deals with inter-group relations and collective ideologies. Psychodrama also uses sometimes the group approach, but only when it tries to reach a group of spectators who have the same individual conflict. It can not deal with collective factors. This is the subject of sociodrama. In sociodrama, the players act not as private individuals but as representatives of a group in a given culture.

There are two fields in which sociodramatic procedures can be applied: anthropology and inter-cultural relations. The basic concept is, that every culture imposes upon its members a certain set of roles they have to play, and the aim of the sociodrama is to bring a cultural order to view through re-enactment of these roles by a number of representative participants. Sociodrama is especially well suited for the study of inter-cultural relations, when two cultures live in close proximity and in continuous interactions. These cultures may have quite different images of the same representative roles like God, priest, head of the state, etc.; or certain roles may

exist in one culture, but not in another. The tensions arising from these problems cannot be alleviated by mere spreading of information. By means of sociodrama they can be explored more deeply and treated as well. By use of television or radio it can reach millions of local groups in which tensions are dormant, and change their attitude.

The author then describes the methods used in sociodrama. One of them is the "living newspaper" technique, first applied in the Viennese "Stegreiftheater" 20 years ago. Three factors had to be considered in this form of production: (1) The localities and personages involved in a certain event; (2) a cast of impromptu reporters who had to get into contact with them and had to act as go-betweens; and (3) a set of impromptu actors who had to portray the roles in their cultural settings. In this way the audience had an opportunity to experience in a living form, the ways of cultural role-taking in various parts of the world.

Spontaneity is a most important factor in this technique. There is no script, no play-writing, no rehearsal, no repetition. As soon as these old trappings of the theatre come back, the spectators become indoctrinated with the old-time rigidity, instead of being educated to become more spontaneously receptive. In the past the newspapers appreciated this spontaneity, but, otherwise, they ridiculed and distorted this experiment, and so in 1940, after a few years of popularity as a WPA project and in the form of the March of Time it came to a dead end.

Besides portraying actual events, sociodrama can be used for exploration of maladjustments of collective nature. The situation in Harlem where cultures live close together was once made the subject of sociodrama; it was shortly after the outbreak of riots there. First the normal situation in Harlem was studied, then the conditions which provoked the riots were investigated, and then the persons who were involved in them were consulted, some of them were brought in to the theatre. The purpose was to determine collective situations and to produce a collective catharsis. Another principal part

of the method was to reconstruct a living Harlem community in sociodramatic situations as it comes to a dynamic expression day by day. For instance, an employment bureau was chosen and the perennial motive: "No employment because you are colored" was enacted. It was easy to find actors among the audience who had had this experience and who tried to act out their own variations of the conflict. Tension in the audience began to mount and a spontaneous mood began to spread, as it must have existed in Harlem before and on the day of the riots. This "warming up" process of reexperiencing a social problem opens new roads for social therapeutics.

Subjects are not to be prepared ahead of time for the role; the procedure must be carried out *sub specie momenti et loci*. There should be no rehearsal, as this would deprive the spectator of a view into the development of the sociodrama. What is lost in perfection is gained in spontaneity and complete participation. The actors may need some training, but must learn to detach themselves from any bias against any culture they portray. The director is the only person who should be prepared for his work. He plans the procedure, gathers information about the social conflict and transmits it to the players.

Sociodrama does not only explore but it also cures. Freud insisted on the strict privacy and the individualizing character of the psychoanalytical situation. But collective problems can neither be clarified nor treated in seclusion of two; they need a forum before which the group can be treated with the same earnestness as the individual is treated in the consultation room. The forum is the amphitheatre and the effect is a community catharsis. This catharsis is brought about by unconscious identification, as Freud would say. The spectators are stirred up by the social conflicts which are shown to them *in statu nascendi* on the stage which are also their own conflicts. Everyone may be the vehicle for the enactment of the roles. Every player is the representative of a group. There is no need for identification, be-

cause there is identity. Spectators and actors, all are protagonists.

The genesis of the drama and its original aim is a collective catharsis.

Richard Trautman, M. D.,
New York, N. Y.

BOYS IN MEN'S SHOES. HARRY E. BURROUGHS (with an introduction by Sheldon Glueck). New York. The MacMillan Company, 1944. pp. XV + 370 Price \$3.50.

Mr. Burroughs has perhaps done more for the newsboys of Greater Boston than any other man. He is the founder of the Burroughs Newsboys Foundation of Boston and of the Foundation's Agassiz Village in Maine. Himself a former newsboy, he understands and loves them and in this book he gives a vivid, personalized presentation of the problems and life of newsboys and bootblacks which makes interesting reading for practically everyone. It is packed full of human interest stories, anecdotes and experiences, drawn from life, and practical solutions to real problems of adjustment. Even specially trained experts such as social case workers, sociologists, psychiatrists and psychologists, will be impressed with the author's wealth of intuitive knowledge of human psychology and practical therapeutics. The book is written in non-technical language without the embellishment of a learned vocabulary.

The twenty-five chapters are all in the first person and describe the beginnings of the Burroughs Foundation, the struggles it went through before it became established, how it grew, what its working principles are, its many and varied activities, life in Agassiz Village, and the accomplishments of the work. There is ample case material in each chapter. It is all done very concretely with an anecdotal style and a wholesome infusion of the author's own background and experiences. Mr.

Burroughs has completely identified himself with the boys he has befriended. He thinks the way they do, feels like they do, knows their problems and how they can be helped. Thus, he possesses the magic key to their hearts. He is able to appeal to boys, interest them in games and hobbies, turn bullies into leaders, bring out the shy, solitary ones, encourage ambition, and send boys into college and useful occupations thus giving them a new sense of values.

The author's ideas on methods of handling boys are born of practical experience. They work and therefore need no explanation but it is well that he has written them down for others to evaluate and study. The reader will ask, "Could Mr. Burroughs have done better if he were professionally trained as a boys' social worker, psychologist or psychiatrist?" The chapter, "Dealing with Delinquents" gives vivid examples of the author's methods. He uses a common sense approach, tries to find out what went wrong to cause the boy to become delinquent, and then proceeds to "straighten the boy out." Mr. Burroughs feels that "there is no such thing as a hopeless case."

The primary needs of the boys are stated simply as companionship, sympathy, and guidance. The aims of the Foundation are to "help the boys live pleasanter, richer lives here and now, while they go about their arduous tasks" and to insure "that the potentialities within these boys shall not be wasted."

In the last chapter, the author gives his "credo." He states that his whole work is founded upon two outstanding, basic principles—"the proper satisfaction of the ego" and "vitamins for the soul." The first is self-explanatory while the second is defined as "those things that help to lift the child from frustration to fulfillment, such as the realization of hopes and aspirations, the achievement of ambition, the feeling of being loved and wanted, the satisfaction of accomplishment, and the assurance of protection."

The book, in spite of its non-technical nature and the "trial and error" methods it advocates, is a definite contribution to

the fields of mental hygiene, vocational guidance, and crime prevention.

Samuel B. Kutash, Ph. D.,
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NARCO-ANALYSIS. J. STEPHEN HORSLEY. A new method in short cut psychotherapy: A comparison with other methods and notes on barbiturates. Oxford University Press, London, 1943.

Horsley refers to Stekel's "active method" of psychoanalysis as the first attempt of shortening psychoanalytic psychotherapy. He feels that the main difficulty in this active therapy is the management of the resistance in some patients. He then discusses the history and technique of hypnosis and its combination with psychoanalysis. The use of hypnoanalysis is very limited since many patients are not hypnotizable and many medical men (including Freud himself) are poor hypnotists. The next step in the development of the new psychotherapeutic technique was the so-called narcotic hypnosis. With this procedure the phenomena of hypnosis were induced by means of a light barbiturate narcosis. Horsley considers the narcotic hypnosis as the forerunner of his narco-analytic method. He started his first experiments with narco-hypnosis in 1931. These new experiments were based on the following observation. He found that patients who were under the influence of nembutal given to them in order to produce an "amnesic childbirth," were able to cooperate and to converse sensibly and that the next day they had no recollection of what they had said or done. This post-narcotic amnesia was essentially the same as a post-hypnotic amnesia. Furthermore, Horsley was able to remove this post-narcotic amnesia by further light narcosis and to reproduce by narcosis all the other well known hypnotic phenomena such as path-

ogenic or therapeutic suggestion, rapport and hypermnesia. Horsley refers also to Lindemann's observations who in 1930 found that persons who are under sodium amytal effect experience a feeling of serenity with a desire to communicate and to speak, and are unable to refuse answering questions even those about intimate matters.

In utilizing the narco-hypnotic state of the patient for an analytic and psychotherapeutic conversation, a technique was developed which the author calls narco-analysis. Narcosis is produced very slowly by the gradual administration of a barbiturate. During the stage of light narcosis a true hypnotic state is induced by verbal suggestions.

The following is the technical procedure as recommended by Dr Horsley: Nembutal 2½-5% Sol. is injected intravenously at a rate of not more than 1cc a minute. When the state of light narcosis is reached, the injection is stopped but the needle is kept inside the vein. At this stage the patient is drowsy but able to understand what is said to him and to speak clearly in reply. Now a hypnotic rapport with him is established. The patient gives up shyness and resistance. He even displays a striking hypermnesia. In this stage questioning and free association is done, and a quantity of information concerning the patient's mental state can be obtained which would not be accessible to ordinary analysis even in months. The analytic procedure is terminated after an hour with final therapeutic suggestion. Thereafter a deep sleep is induced by further injection of the narcotic solution until unconsciousness sets in, according to the need of the individual patient. The session can be repeated the next day or at longer intervals. A few treatments are sufficient in many cases, in other cases up to 30 seem to be necessary.

In a special chapter Horsley discusses the importance of abreaction, transference, and resistance as they appear in narco-analysis, and reports a series of dreams

brought out in the analytic procedure, without giving interpretations, however. He stresses that the high value of his method lies in the breaking through of resistance. He points out that active and synthetic re-educational psychotherapy must follow the narco-analytic treatment. Narco-analysis is not only a means of therapy but also a way of psychiatric diagnosis. It reveals the emotional background of certain behavior patterns and neurotic reactions. Horsley feels that simulation and malingering can be detected by narco-analysis. He gives the following indications for narco-analysis: (1) Hysteria especially hysterical amnesia; (2) Anxiety states; (3) Resistance occurring at any stage of psychoanalysis; (4) Differential diagnosis of the sequelae of head injuries; (5) Diagnosis of doubtful psychotic states; (6) Fits of doubtful origin; (7) Simulation and malingering.

The author differentiates his narco-analytic method from the so-called drug-analytic method. In the latter barbiturate is injected until the patient is in a deep sleep lasting about four hours. After the awakening, the analytic contact is made to utilize the increased accessibility of the patient. The method is used mainly as a diagnostic aid in mute and inaccessible psychotics, in depressed and agitated patients, and in reticent neurotics. He recommends this method for the battle field practice, to relieve acute anxiety, or to elicit informations which are valuable in planning further treatment.

A special chapter is devoted to the discussion of the chemistry and the pharmacodynamic effects of the various barbiturates. According to Horsley, in clinics and hospitals, fairly short acting drugs should be used for narco-analysis, such as sodium amytal or nembutal. In ambulatory cases, however, he prefers the very short acting group such as evipal sodium or pentothal sodium.

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